

Very O. R. 1872.

# AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,

INSURANCE, BANKING, MINING, MANUFACTURES.

---

**HENRY V. POOR, *Editor.***

---

**SATURDAY, FEBRUARY 12, 1859.**

---

**Second Quarto Series, Vol. XV., No. 7.—Whole No. 1,191, Vol. XXXII.**

---

---

**ESTABLISHED IN 1831.**

---

**NEW-YORK:**

**PUBLISHED WEEKLY, BY**

**JOHN H. SCHULTZ & CO.**

**Front Room, Third Floor,**

**No. 9 Spruce Street.**

# ROOFING.

FLOORING OF RAILWAY BRIDGES, ETC.

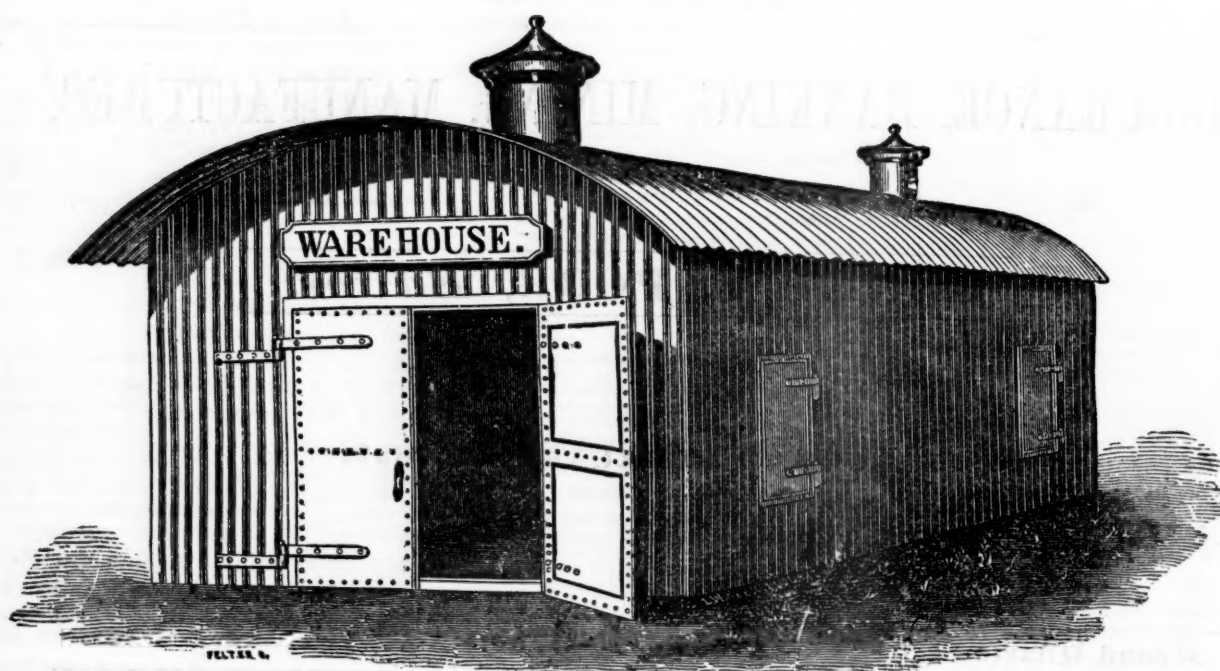
**GALVANIZED SHEET IRON,**

CORRUGATED OR PLAIN;

ORDINARY SHEET IRON PREPARED IN THE SAME WAY.

Plans and Estimates given for IRON ROOFS to be erected in any part of the UNITED STATES.

**Cornices, Gutters, Ridge Caps, Leaders, Spouts, etc.**



**CORRUGATED IRON BUILDING COMPLETE.**

FOR CORRUGATED IRON ROOFS we refer to Buildings in the New York Navy Yard, the New Depot of the New Jersey Railroad and Transportation Company at Jersey City, Capitol Extension at Washington, U. S. Custom Houses, etc., in various parts of the UNITED STATES.

The subscribers have constantly on hand and for sale :

Galvanized RAILROAD SPIKES,  
Galvanized SHIP SPIKES,  
Galvanized SLATING NAILS,  
Galvanized LIGHTNING RODS,

Galvanized HOOP IRON,  
Galvanized CUT and WROUGHT NAILS,  
Galvanized WIRE,  
Galvanized SCREWS,

Galvanized SHEATHING NAILS,  
Galvanized RIVETS,  
Galvanized SHEET IRON, of all Widths  
and Gauges.

**CORRUGATED SHEET IRON FOR ROOFING.**

**PLUMBERS AND STEAMFITTERS' BRASS WORK.**

**SHOT, PIPE AND SHEET LEAD.**

**Pig Lead, Pig Iron, Sheet Iron, Tin Plates, Spelter, Banca and Straits Tin, Ingot Copper, Braziers' Sheets, and other Metals.**

**MARSHALL LEFFERTS & BROTHER,**

**No. 57 Beekman st., NEW YORK,**



# AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,  
INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

ESTABLISHED IN 1831.

PUBLISHED WEEKLY BY J. H. SCHULTZ & CO., AT NO. 9 SPRUCE ST., NEW YORK, AT FIVE DOLLARS PER ANNUM.

SECOND QUARTO SERIES, VOL. XV., No. 7.]

SATURDAY, FEBRUARY 12, 1859.

[WHOLE No. 1,191, VOL. XXXII.]

MESSRS. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, LONDON, are the authorised European Agents for the Journal.

## PRINCIPAL CONTENTS.

Railroad Management—New York & Erie R.R.	97
Wilmington and Manchester Railroad	98
Pork Packing in the West—Full Returns from all Points	98
Eaton and Hamilton Railroad	99
South Carolina Railroad	99
Journal of Railroad Law	100
Finances of Philadelphia	101
Railroad Earnings	103
Delano's New Method of Burning Coal	104
The Commercial Bearings of the Treaty betw. "the Four Great East and West Lines"	105
London Correspondence	105
Northern Central Railroad	106
Dayton and Michigan Railroad	107

## American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, February 12, 1859.

### Railroad Management.—New York and Erie Railroad.

(The following communication is from the same pen as the article in our last week's issue, upon a similar subject.)

The whole country has a deep stake in the successful management of railroads. We all want the trade of the West through our railroads to our city. While this is accomplished, we also desire that the railroads themselves should be profitable and self-sustaining. This can only be accomplished by economy of management. If the owners of railroads manage them by the constant application of personal care, they will be just as successful as they are by the application of such care in any and every other business. We see it daily stated that there are four great lines of railroad to the West, and that they are competing for the same business. Honest and right-minded men, when engaged in sharp competition for a common business, endeavor to reach success by transacting their respective shares of such business with the strictest good faith, and the most rigid economy. In this way success is insured. The same rules should govern men in the management of railroads. They will govern them, if such men have a real in-

terest in the success of the road. We do not want to have railroad managers reduce fares and freights—now too low—and in that way destroy the value of the railroad property. Nothing can be more fatal than this.

The Erie Railroad has shown that its receipts are over five million of dollars a year, and yet with such receipts it cannot pay interest on its debt. Its capital is gone. It should show a yearly net income of two millions and a quarter of dollars. It would show this, if it was managed as property ought to be. That line has always suffered. There have been collateral objects, that have taken up the time of its managers; or they have set themselves down here in the city of New York, and attempted to manage it by a set of abstractions; by issuing circulars; by the theories of a single mind. This will never be successful.

A great deal more practical, thoughtful counsel is required. Such an addition would at once take an interest with the operatives on the road; would enter into their feelings, and thereby soon engage all their interests and exertions in a common effort to redeem the road from its embarrassment; to produce economy in every department; in short, to make it thrifty. Exactly the opposite must be the feelings of the men now. This is a matter in which not merely the stock and bondholders of the Erie Railroad are concerned. The whole railroad interest will be advanced by the success of that great road. Personal considerations are of no sort of consequence. Unfitness, the moment it is obvious, should be noticed; and when such sad results as the last report of the Company shows, are considered, it is the right and duty of all men to speak. The President's salary would pay six men for passing most of their time on the line of the road, and would soon enable them to become acquainted with the value of every service rendered upon it. It would lead them to become acquainted with all the men upon it; to consult with them, and to obtain their views and opinions. It is in every railroad man's experience that the most valuable suggestions are thus obtained. When these are properly appreciated, those who offer them will be stimulated to exertion, and the result will be a general improvement. We repeat, that the reform most needed on the Erie Railroad is a reduction of expenses; not a moderate, but a large

reduction. There must be great waste or great unfaithfulness somewhere. Five millions of dollars earned and received in one year for freight and fare, is an enormous receipt. It is enough, if the affairs of the Company are well conducted, to make every creditor satisfied, and every stockholder of the concern hopeful. It is not increased receipts, not the sale of lots, not the borrowing of money, not cutting off a few editors, not requiring passengers' names, not openly setting the public to watch their conductors, that is wanted, but real genuine acquaintance with every locality upon the road; a patient and careful examination as to its business; a respect for the views of the inhabitants on the line; acquaintance with all the agents employed upon the road; a consultation with them; an intimate knowledge of the manner in which their respective service is rendered; whether it is grudgingly or freely rendered; whether the condition of any could be made more comfortable by an enquiry into their cases and such attention to them, as the man who is well served always cheerfully bestows. Ten thousand little things of this character, which cost nothing, and go so far to conciliate and produce so much better results than crabbed and silly orders, and a dictatorial rule. We may rely upon it, that there will never be an increase in net receipts until there is strict, and faithful, and conciliating care exercised over the expenses, and they be brought down to reasonable limits.

In these suggestions we have but one hope, one end, and one earnest wish, and that is, that the Erie Railroad, as a property, may be improved. It is a great work. In its origin, and process to completion, there was manifested an earnestness of purpose, and an energy of action, that commanded respect. Now that it is finished, and one among the most prominent of this greatest of modern improvements, there must be nothing to impede its usefulness, or impair its value. Its managers must feel that they have a mission far higher than to be conducting a system of espionage upon other lines, and bring the public with complaints against one line for one thing, and another for something else. They must be sure to do their own business well by the public, and the property committed to their trust will reach its highest value, and command a corresponding price.

**Wilmington and Manchester Railroad.**

The eleventh annual meeting of the stockholders in this road was held at Wilmington, N. C., Nov. 18th. The reports of the President, Superintendent, Treasurer, etc., giving a detailed history of the operations of the road for the fiscal year ending Sept. 30th, were presented and adopted. The receipts were:

From through travel .....	\$139,813 74
" way .....	70,697 05
" up freights .....	43,289 32
" down .....	85,641 63
" mails .....	42,750 00
	<b>\$382,191 74</b>

**The expenditures were:**

Repairs of track .....	\$71,300 12
" bridg's & trestle .....	11,595 07
" engines .....	39,610 67
" cars .....	22,882 83
Station expenses .....	20,829 54
Wood and coal .....	18,876 49
Oil, fluid, tallow, etc. ....	5,174 51
Enginemen, firemen, conductors, etc. ....	33,375 52
Ferry expenses .....	8,572 99
Salaries of officers .....	8,734 99
Paid S. C. R. R. Co. ....	5,551 97
Office exp., printing, etc. ....	1,887 00
Lost and damaged goods, etc. ....	5,479 13
	<b>\$253,870 82</b>

Applicable to previous year .....	44,105 12
	<b>209,765 70</b>

Accounts outstanding this year .....	13,301 79
--------------------------------------	-----------

Net revenue .....

Included in the cost of repairs of engines and cars are: one new engine, \$9,000; and 10 freight and 2 mail cars built in the company's shops, \$1,700. Five passenger cars have also been rebuilt.

A comparison of the earnings of the past with the previous year, shows a falling off in receipts from up freights of \$14,333 34; down freights, \$4,996 44; through travel, \$63,314 17. The receipts from way travel show an increase of \$2,319 77. This diminution of business is attributable to several causes—foremost among which may be mentioned the financial embarrassments in which the whole country was involved, and which was felt to a greater or less extent by all departments of industry. The opening of the North East Railroad afforded a more direct communication with Charleston. The transportation of cotton to market, and of goods in the interior, was to some extent shared with that road, while the coastwise travel was diverted at Florence, the point of junction. By the completion of the East Tennessee & Virginia railroad, a new and more direct route was opened between the north-eastern and south-western cities, over which through tickets were issued at greatly reduced rates; while increased accommodations were afforded by the several lines of steamers between Savannah and Charleston and the North. The long established through ticket arrangement between Wilmington and the northern cities was broken up, and the fares increased some twenty per cent. This latter, more than all other adverse circumstances, tended to divert the through travel from this, and to turn it into the new channel. Hopes are expressed in the report that the through ticket system will be re-established;

and that "whenever the route from Baltimore to Atlanta over this line can offer to the traveler through tickets at the same price as by the western line, and give the same facilities for checking baggage to remote points, it will command a fair share of the travel."

The following is a statement of the receipts from all sources, and the disbursements during the year:

RECEIPTS.	
Cash and cash items, Sept. 30, 1857 ..	\$65,028 63
Increase of capital during the year ..	1,427 10
Credited to profit and loss .....	1,030 70
Receipts from transportation .....	382,191 74
	<b>\$449,678 17</b>

DISBURSEMENTS.	
Paid current expense of road .....	\$209,765 70
" accounts applicable to previous years .....	44,105 12
" interest and premium on exchange .....	84,007 45
Amount of debt decreased .....	9,211 97
Paid on account of construction, etc. ....	41,424 04
Cash and cash items .....	61,163 89
	<b>\$449,678 17</b>

The company have 14 passenger and 8 freight engines; 20 first class and 2 second class passenger cars; 6 baggage and 4 mail cars; and 156 freight cars.

The same mileage has been performed by the trains as in the previous year, and with an equal amount of rolling stock in active service. The business might also have reached or even exceeded that of 1857 without adding appreciably to the cost of operating.

**GENERAL STATEMENT.****Balance Sheet from the Treasurer's Books, Sept. 30, 1858.**

By Capital Stock .....	\$1,125,314 91
" First Mortg. Bonds, \$596,000 00 ..	
" Second do. do. 200,000 00 ..	
" Income Bonds .....	177,000 00
	<b>973,000 00</b>
" Bonds secur'd by W. & W. R. R. stock, 150,000 00 ..	
" Bills payable .....	108,807 92
" Requisitions payable .....	813 64
	<b>259,621 56</b>
Due on Negro Bonds, open accounts, etc. ....	28,118 29
By Profit and loss account .....	315,863 30
" Net profits of the road for the past year .....	128,320 92
	<b>\$2,830,238 98</b>
DR.	
Construction .....	\$2,413,364 63
Filling trestle .....	20,399 09
Interest on stock .....	28,815 30
Interest account .....	83,345 78
Paid on account of contracts .....	2,438 90
Wateree & Hamburg R. R. survey ..	2,439 07
C. & D. R. R. Co., on account of stock .....	19,211 22
Wilmington & Weldon R. R. stock ..	201,500 00
Due from Post Office Department .....	\$10,687 50
Amount of bills rec'v'able .....	9,550 92
Due from R. R. companies .....	6,520 85
Do. agents .....	16,921 34
Do. banks .....	321 60
	<b>44,002 21</b>
Cash on hand .....	14,722 78
	<b>\$2,830,238 98</b>

The officers of the company are:

President—THOMAS D. WALKER.

General Superintendent—JAMES P. ROBERTSON.

Secretary—WM. A. WALKER.

**Pork-Packing in the West—Full Returns from all Points.**

The Cincinnati *Price Current*, of the 2d inst., publishes full returns from all hog-slaughtering points in the West, except Chicago and Toledo, (those places are reported up to latest dates,) which show an increase this season over last of 227,888 hogs. The figures comparing the two seasons, and remarks, are as follows:

	1857-8.	1858-9.
Ohio .....	610,060	624,109
Kentucky .....	372,609	397,117
Indiana .....	441,885	407,636
Illinois .....	463,577	596,136
Missouri .....	176,386	155,774
Tennessee .....	42,875	65,172
Iowa .....	85,583	158,217
Wisconsin .....	16,000	32,702
Grand totals .....	2,208,975	2,436,863
		<b>2,208,975</b>

Increase .....

There is an increase of slightly over 10 $\frac{1}{4}$  per cent., as compared with the packing last year.

With reference to the weight, we succeeded in obtaining the comparison from one hundred and seventy-nine places, both as regards the average weight of hogs and the yield of lard per hog.

We have classified the weight for each State, and find the average to be as follows:

	Average Weight of Hogs.	Yield of Lard per Hog.
	1857-8.	1858-9.
Ohio .....	211	196
Indiana .....	202	186
Illinois .....	202	183
Kentucky .....	212	217
Iowa .....	199	173
Missouri .....	202	174
Tennessee .....	213	218
Wisconsin .....	235	230

The averages of the above weights would not be a correct average for all the hogs packed, as the relative numbers packed in each State are to be taken into calculation, in arriving at an estimate approximating to accuracy. For instance, the above figures would show a falling off in lard of  $\frac{1}{4}$  pounds per hog, when in fact it is  $\frac{1}{4}$  pounds per hog, as we have ascertained by calculating each State, and the same remarks will apply to the average weight of hogs.

As regards the average weight of hogs, we obtained, as we have already stated, the returns from 179 places, and find the total weight of hogs packed at these places last year to be 411,199,140 pounds. The weight of a similar number packed at the same places this year is 386,009,183. This is slightly over  $\frac{1}{4}$  per cent. of a decrease in weight, which is equal to 139,253 hogs; which being deducted from the excess as given above, leaves the net increase in number 78,635, thus showing a net increase of a shade over  $\frac{3}{4}$  per cent., as compared with the crop of last year. The hog crop of 1858-9 compares then as follows, with that of the last two years:

3 $\frac{1}{2}$ per cent. greater than that of 1857-8.	
18 $\frac{1}{2}$ " " " " " " " " " " " "	
1856-7.	

As regards the falling-off in the lard, the average yield per hog, as shown by the returns, was 30 lbs. last year, and 25 $\frac{1}{4}$  lbs. this year. Now, by multiplying the whole number of hogs packed both years, as reported above, by the yield of lard per hog each year, we can arrive at the comparative supply of this article with all the accuracy necessary:

	Lbs.
1857-8. 2,208,975 hogs, 30 lbs. per hog, 66,269,250	
1858-9. 2,436,862 hogs, 25 $\frac{1}{4}$ " " " " " " " " " " " "	61,530,791

Decrease .....

This is about  $\frac{7}{8}$  per cent. of a decrease as compared with last year. An impression prevails, very generally, that the deficiency in lard is much greater than this; but it seems to have been over-



looked that while there is a large falling-off in the yield per hog, there is a greater number of hogs from which to obtain the article this year than last.

Our correspondents are unanimous in stating that farmers and store-keepers packed very little pork this season, while a greater amount than usual was cured by them last year; so that there can be no doubt that the supply of bacon and bulk meats from this source, the present season, will be very small indeed, as compared with that of last year. It should be remembered, however, that the large amount of last year's cure, which passed over into this year, answers, to a great extent, as an offset for this deficiency, and in making calculations regarding the supply, this should be borne in mind.

#### Eaton and Hamilton Railroad.

The receipts of this road for the fiscal year ending December 31, 1858, were:

From passengers .....	\$56,942 47
" freight .....	89,380 91
" mails and express .....	5,542 84

\$151,866 22

And the expenses were:

Maintenance of track ....	\$18,672 20
Do, equipment .....	17,089 16
Rent of track at Hamilton .....	10,000 00
" paid for equipment .....	6,010 38
Fuel .....	8,326 48
Conducting transportation .....	35,240 62
Rebuilding bridges .....	4,737 35
" culvert .....	4,136 56
Delinquent taxes for 1857 .....	3,038 26
	107,251 01

Carried to general revenue account .... \$44,615 21

To which add—

Individual debts and cash assets of 1857 .....	6,493 67
Proceeds of real estate sold .....	84,034 94
Miscellaneous items .....	14,005 46

General revenue for the year 1858 ... \$149,169 28

Disbursed as follows:

Interest account .....	\$4,137 41
Paid for cars .....	4,600 00
Domestic bonds redeemed .....	26,031 29
Notes paid .....	38,467 37
Real estate bonds redeemed .....	40,000 00
Suspended interest paid .....	20,193 32
Paid balances due in 1857 .....	10,356 52
Sundries .....	2,868 13
	146,654 04

Assets and cash on hand ..... \$2,515 24

It will be seen from the above that the original floating debt of the company has been reduced some \$74,500; the funded debt some \$40,000; and the suspended interest debt some \$20,000—still leaving a floating debt to be provided for of some \$30,000, in addition to the suspended interest debt. For the payment of this balance of floating debt, and to complete the purchase of rolling stock sufficient to successfully operate the road, will require the entire application of the net revenues of the year 1859.

The gross revenue of the road for the past, as compared with the preceding year, show an increase of \$10,930 34. This increase was derived exclusively from the tonnage of the road—which was some \$16,000 in excess of 1857; while the passenger traffic was some \$6,000 less.

Included in the current expenses above, are some \$12,000, which are not properly chargeable thereto—having been expended in rebuilding two bridges that were destroyed by fire, for rebuilding a stone culvert and the payment of taxes for the previous year. The following is the company's

#### GENERAL STATEMENT.

Capital stock .....	\$469,762 68
Bonds issued .....	717,734 00
Domestic bonds .....	11,118 84
Bills payable .....	14,248 59
Suspended interest .....	138,445 62
Miscellaneous .....	7,558 16
	\$1,358,867 89
Construction .....	\$1,101,744 69
Equipment .....	79,022 91
Real estate .....	37,091 51
Cincinnati and Chicago R. R. Co. ..	47,300 00
Cincinnati, Logansport and Chicago Railroad Line .....	15,330 70
Profit and loss .....	63,778 77
Transportation balance .....	11,776 79
Post Office Department .....	\$1,173 25
Railroad current balance .....	1,487 36
Treasurer E. & H. R. R. ....	161 92
	2,822 52
	\$1,358,867 89

The officers are:

President—D. BARNET.

Treasurer—E. W. M'GUIRE.

Superintendent—D. M. MORROW.

#### South Carolina Railroad.

In the report of this Company for the fiscal year ending December 31st, the gross earnings from operations of the road are stated as follows:

From freight .....	\$1,017,421 31
" passengers .....	416,801 05
" mails and minor sources .....	66,786 08
	\$1,501,008 44

The expenses for same time were:

Bureau department—salaries and contingencies .....	\$18,054 37
Transportation department—salaries and wages .....	238,323 98
Conducting transportation .....	37,551 06
Annuities to the city of Augusta, from Aug. 1, 1857, to Dec. 31, 1858 .....	9,916 66
Oil and tallow .....	20,635 32
Wood .....	53,587 94
Maintenance of machinery .....	146,029 69
" " road .....	127,689 68
Savannah River Bridge .....	27,837 21
Masonry on Hampton's Bridge .....	870 68
	680,496 59
	\$820,511 85
Less sterling interest .....	\$122,142 74
" general .....	56,803 05
" damages, etc. ....	13,486 42
	192,432 21

Leaving a net income of .....

Dividend for first 6 mos. ....	\$155,184 00
" " second " .....	164,883 00
	\$320,067 00

Carried to surplus income acc't. \$308,012 64

Compared with the previous year, there has been an increase in gross receipts of \$51,205 62; and in net earnings, \$83,537, notwithstanding a decrease of passage during the year of \$17,283 93 on local business, and of \$60,378 on through business; the latter was chiefly attributable to the opening of the Virginia and Tennessee route. The increase on the general business of the road has, however, more than supplied the deficiency. The business of the year has also been done at a much reduced cost when compared with the years 1856 and 1857—having been brought to the very economical point of 45.34 per cent., which covers extra as well as ordinary expenses. But for the decline in passenger business, the results of the year

would have far exceeded those of 1855, in which the income of the road reached its highest point.

The Auditor's statement shows that the debt of the company has been reduced from \$3,537,608 65, in 1857, to \$3,213,850 12. This reduction, amounting to \$323,758 53, has been effected, in part, by the application of \$212,123 60 from the current income of the year, the balance, \$111,634 93, from the application of assets which have been made available and applied to this purpose.

The bonds of the Company fall due as follows:

Past due .....	\$11,400 00
In 1859 .....	24,597 99
" 1860 .....	47,631 67
" 1861 .....	3,500 00
" 1863 .....	451,333 83
" 1866 .....	2,000,000 00
" 1868 .....	192,000 00
	\$2,730,462 99

The President recommends that the policy of the Company with reference to its debt should, to a general extent, be determined on. He says:

"The ability of the Company to discharge its obligations is unquestionable; but the original agreement made when the European debt was contracted, imposes upon us the obligation to provide for too large an amount in one instalment. The debt should be arranged by distributing it over a series of years. The rate of interest paid on the foreign debt being only 5 per cent., it was inexpedient at an earlier period to exchange it for one bearing a larger rate of interest. It is, however, improper to suffer the maturity of the debt to approach too near, before provision be made against even a temporary default of payment. We, therefore, propose that the Company, by resolution, declare its concurrence in the policy indicated, and authorize the Board to re-arrange, by the substitution of other bonds, such portion of the present debt of the Company as they may find it inconvenient to provide for out of the present assets and current income, without interfering, to too great an extent, with the usual dividends. The Board are of opinion that there is no reason to believe that the rate of dividend recently declared will be diminished by adopting the plan suggested. They would also bring to the attention of the stockholders the fact exhibited on the last annual statements, that for the next four years the bonds falling due amount to but \$80,000, so that the discharge of a considerable portion of debt will necessarily be effected by payments of cash during the same period—thus strengthening the credit of the Company and facilitating the operation of extending the term of settlement for the balance of the debt."

No expense of an extraordinary character has been incurred in the road department during the past year, except for the erection of a new bridge over the Savannah River, at Augusta, and for the stone abutments for the renewal of a bridge of one span eighty feet in length, at Hampton's, on the Columbia road. The former was sufficiently completed to allow trains to pass over it on the 10th of December.

Howe's patent has been followed in its construction; It is of six spans, 904 feet in length, inclusive of a pivot draw. The end spans are 152 feet each, the remaining four 150 feet each. Its width outside is 18 feet 6 inches—width in the clear, 14 feet—and in clear height, 18 feet. It is supported upon seven piers of carefully selected black cypress, and an abutment of brick at the eastern end. Each pier, strongly framed, sets upon 20 piles—the draw pier upon 36 piles. On the Hamburg side, a trestle, about 1,000 feet in length, has been erected to approach this bridge, and an alteration and

elevation of the tracks in Augusta, became also necessary.

The masonry at Hampton's is progressing.

The line of road is in very good order, with the exception of a few points on the Hamburg branch, which require new iron. The Company will receive, during 1859, 2,000 tons of American rails, under a contract recently made with the Phoenix Iron Works, of Pennsylvania. The weight will be 58 lbs. per yard. Old rails are delivered to them in Philadelphia, the new iron received at that port, paying them a difference of \$20 per ton.

#### GENERAL CONDENSED STATEMENT.

Capital stock, 42,803 shares .....	\$4,179,475 00
Surplus income .....	308,012 64
6 per ct. sterl. b'ds, payable in 1863 .....	183,333 33
5 do. do. do. 1866 .....	2,000 000 00
6 do. b'ds to St. of S. C. do. 1858 .....	8,000 00
6 do. do. do. 1863 .....	192,000 00
7 do. bonds to Auditor's order .....	246,500 00
Bonds to individuals .....	34,629 66
Do. issued for double track, etc. ....	66,000 00
Bills payable .....	172,998 88
Scrip account .....	20,092 68
Pay rolls .....	39,534 92
Dividend notes due April, 1859 .....	24,919 00
Do. do. January, 1, 1858 .....	164,883 00
Transient creditors, coupons, etc. ....	60,963 65
	\$7,701,337 76

Property in 242 miles of road .....	\$5,517,384 58
Lands .....	324,531 43
88 Negroes .....	77,961 72
62 Locomotives .....	516,344 46
59 passenger and 790 freight cars ..	534,444 60
Materials and machinery .....	52,341 21
Bills receivable .....	12,172 02
Bonds do. ....	53,283 36
Stock in various roads .....	374,060 00
Transient debtors .....	12,179 57
Sundry railroad accounts .....	71,672 40
Due by agents .....	103,370 19
Do. Post Office Department .....	12,750 00
Cash .....	38,842 22
	\$7,701,337 76

The officers of the company are:

JOHN CALDWELL, *President*.

H. T. PRAKE, *Superintendent*.

THOS. WARING, *Auditor*.

[From "*Nouvelles Annales de la Construction*, August, 1858."]

#### Employment of Artillery in Public Works.

They are now working in the "Department de l'Ariege, (France), on the improvement of the Imperial Route, No. 119, which, according to the location adopted, passes through the grotto of Mas-d'Azil, which has already been opened. At the entrance of the grotto, and at the highest part of the arch, there hung an enormous block of stone, presenting a considerable surface and adhering in a very imperfect manner in the adjacent rock.

Suspended at a height of 197 feet (60 metres) above the road, this rock menaced the safety of the travel; it was very necessary to detach the parts threatening to fall, and to consolidate the rest.

The engineer in charge of the works, saw that in blasting under such circumstances, the difficulties were almost insurmountable, and it seemed that cannon only could dislodge this inaccessible obstacle.

He therefore wrote to the prefect of Ariege to ask him for the assistance of some artillery, when, fortunately, a battery of the 10th regiment of that arm passed through Labastide about ten kilometres from the grotto.

The officer of this battery, having received in the meantime, by telegraph, orders to consult with the engineer, and to assist him, if possible, went on the 19th of June to Mas-d'Azil with two pieces

(cannons obusers) of four inches ((0.12m.) diameter. He placed these pieces on the road at a distance of 820 ft. (250 m.) from the grotto, in such a position, that notwithstanding the height of the rock, the limit of the angle which the gun could make with the horizon was not passed. The two guns threw with a remarkable precision. At the fourth shot the operation was finished, all portions of the rock which had seemed not to be intimately connected with the arch having been removed. The large block remained, but was no longer menacing; to prove its solidity, several balls were lodged in an open crack on the slope of the hill, and during this firing no movement was manifested in the mass, although the projectiles were forced to break off the edges of the rock, and to penetrate like wedges.

#### Journal of Railroad Law.

##### STOCK SUBSCRIPTION.—LIABILITY THEREON.

The liability of persons upon voluntary subscriptions has been a matter of much consideration and of some doubt. The following recent case in the Court of Appeals of this State determines the liability of a person on a subscription for railroad shares.

*The Buffalo & N. Y. City R. R. Co. agt. Dudley.*

This action was brought to recover the amount of a subscription made by the defendant to the capital stock of the Attica and Hornellsville R. R. Co. The name was subsequently changed to the Buffalo & New York City Railroad Company. The route also was changed. The defendant contended that, firstly, his subscription created no legal liability and, second, even if it did, the subsequent charge would absolve him therefrom. We shall give this week only such part of the case as bears upon the first question leaving the other for a subsequent occasion.

The caption or statement in the books, under which the defendant subscribed, were as follows:

"ATTICA & HORNELLSVILLE RAILROAD.

Capital Stock, \$750,000, divided into shares of \$50 each.

Books opened at the Mansion House, in the city of Buffalo, pursuant to a resolution of the commissioners, on the 10th day of December, 1845.

We the subscribers agree to take the number of shares by us subscribed of the capital stock of the Attica and Hornellsville Railroad Company subject to all the liabilities and penalties of the charter and by-laws of the said corporation."

Under this the defendant with other subscribers, wrote his name as follows: "Thomas J. Dudley, twenty shares." This was done about the 24th of March, 1847; and at the time of subscribing the defendant paid five per cent. upon the amount and took the receipt of one of the commissioners therefor.

JOHNSON, J., who delivered the leading opinion of the Court after a consideration of the question whether this subscription constituted an express written promise to pay, arrived at the conclusion that it did not and then proceeded as follows:

But upon this subscription, undoubtedly, the law raises an undertaking to pay the amount subscribed. It is contended by the defendant's counsel that an implied promise can only be raised upon a past consideration, upon some benefit or advantage which has already accrued to the party upon whom the obligation is presumed to rest. This is conceded. But the interest in the twenty shares of stock subscribed vested in the defendant the moment his subscription was complete. And this obviates also the other difficulty suggested by the defendant's counsel of a want of mutuality on the part of the plaintiff. The contract was ex-

ecuted on the part of the plaintiff when the defendant became a stockholder. That the defendant became a stockholder in the corporation and the owner of the shares subscribed for, is fully settled in *Spear vs. Crawford* (14 Wend. 20). Indeed the power of forfeiture given to the directors in the charter must proceed upon the assumption that the subscriber becomes the owner of the stock.\* The interest acquired by the subscription is a good consideration to support an action for the amount subscribed by the subscriber. *Aug. & Ames on Corp.*, 474. If this is not so and the argument is to be regarded as merely executory between the parties to deliver stock on one side when paid for and to pay on the other, it would clearly fail for want of an undertaking on the part of the plaintiff to deliver. There would be no mutuality whatever. The defendant's counsel insists that the defendant could not become a stockholder until his stock was apportioned or set off to him by the commissioners appointed to receive subscriptions. The charter however only provides for a distribution in case of an excess of subscriptions over the amount of stock. But that fact is not shown, and is not to be presumed in the absence of evidence. If no more than the amount was subscribed, the commissioners had no power to distribute and the several subscribers would be the stockholders holding the number of shares respectively taken. Had it been shown that the amount subscribed before the books were closed was greater than the whole capital, the plaintiff would have been compelled to prove in order to fix the defendant's liability, that the amount subscribed, or some other amount, had been awarded to him in the distribution; because, in such a case, as the amount of stock cannot be increased, a distribution becomes necessary in order to determine who are the stockholders, and the number of shares each is entitled to, and the subscriptions are made subject to such right or power of distribution, if the state of the subscription shall render its exercise necessary. The presumption of law, however, must be, I think, that the books were closed the moment the stock was all taken by subscription, and thus the title of the several subscribers to the number of shares respectively taken, subject to forfeiture by the directors for non-payment, became perfect the moment the books were closed.

The certificate is not essential to the ownership. It is mere evidence of title which the owner may require at any time and which the court would compel the corporation to deliver to the person entitled. *Aug. & Ames on Corp.*, 476; *Chester Glass Company vs. Dewey*, 16 Mass., 94; *Spear vs. Crawford*, *supra*. The plaintiff is not deprived of the remedy by action to recover the amount subscribed, because the power to forfeit the stock for non-payment is conferred by the charter upon the directors. That is a cumulative remedy merely. The corporation may lose the right of action by first resorting to remedy by forfeiture, for the reason that the forfeiture operates as a rescission of the contract, and the contract being ended no foundation remains for an action to rest upon. This was settled in the case of *Small vs. the Her-*

\* The charter of the plaintiffs provided might require payment of the subscriptions under the penalty of forfeiture of the stock and all previous payments.



Mer Manufacturing Company (2 Comst., 330). But as long as the contract remains in force, action to recover for the amount of stock taken may be maintained by the corporation against the subscriber. And it makes no difference whether the promise to pay is express or implied. The legal consequences of the undertaking to pay must be the same, whether it is express or such as the law implies merely. Several cases decided in other States were cited upon the argument to sustain the position that the corporation must resort to the remedy by forfeiture, in the case of an implied promise to pay for the stock subscribed, and could maintain an action only upon an express promise to pay. I am unable to perceive any solid grounds upon which such a distinction can be made. It has never been obtained in this State, and I cannot see how it can be maintained upon principle. For aught I can see, the rights of the subscriber and the corporation are precisely the same in either case. This point was fully considered in the Northern Railroad Company vs. Miller (10 Barb., 260), in the able and elaborate opinion of Mr. Justice Willard, and the distinction shown to be entirely destitute of foundation.

Mr. JUSTICE SELDEN also rendered an opinion, which he concurred with Mr. Justice Johnson in holding that the contract of subscription raised at least an implied promise to pay therefor, and that the remedy by forfeiture given to the direct- or was cumulative only. He was also of the opinion that the subscription itself constituted an express written promise to pay the subscription, on which point his opinion was as follows:

"It is insisted that the promise to pay, if any exists, arises by implication alone, and that to give a common law remedy by action, in addition to the statutory remedy by forfeiture, provided by the charter, it is necessary there should be an express promise. To this it may be answered that it is no means clear that the promise is to be regarded as implied merely. On the contrary, as I understand the distinction between express and implied promises, that existing in this case belongs to the former class. An express promise is one which is expressed in words. No particular form of words is essential to such a promise; but if the language used, when fairly interpreted, imports an undertaking to pay this, I apprehend, constitutes an express promise. The letters I O U, which have been held to amount to a promissory note, constitute an express promise no less than it words 'I promise to pay' had been used. An implied promise, on the other hand, is one which is deduced from the language of the party, and which the law raises upon principles of equity and justice, in view of some consideration related. In this case a promise to pay is necessarily embraced in the agreement to take stock, and is subject to the 'liabilities of the charter.' As there was no way in which the defendant could take stock, agreeably to the charter, without paying for it, an agreement to take of course included a promise to pay, and this, I apprehend, must be considered an express promise.

If, however, it be considered as belonging to the class of implied promises, the consequences would be the same. I am not aware of any distinction, as far as the remedy is concerned, between an express promise and one which exists by implication of law. The promise being once raised, the ob-

ligation imposed is as binding and effectual in one case as in the other.

The Court also considered the effect of the alteration of the Company's route, which they held to be no defence, and judgment was rendered for the plaintiffs.

#### Finances of Philadelphia.

EXTRACT FROM THE MAYOR'S MESSAGE.

The finances of the city during the past year have been embarrassed, owing to the insufficiency of taxes provided for the payment of the appropriations to the different departments, and for the discharge of the outstanding liabilities of the preceding year.

Besides the revenue of the city derived from other resources the net amount of proceeds from taxation needed to provide for the appropriations of 1858 and for the deficiency of 1857, was about \$2,959,000, whilst the net amount to be received from that source, under the rate as fixed by Councils, could not exceed \$2,550,000. The deficiency thus caused, together with the inadequacy of the appropriations for the necessary current expenses of the government has been provided for by the creation of a loan of \$450,000, thus unavoidably adding to the funded debt of the city.

The receipts of the City Treasury during the past year amounted to \$4,744,963 44, which, with the balance on hand January 1st, 1858, made a total of \$5,233,001 54. Of this sum \$5,035,518 33 have been expended, leaving on the 1st of January, 1859, a balance of \$197,383 20. A temporary loan of \$200,000, negotiated in November last, will mature in March of the present year, but will be amply provided for by outstanding taxes.

Many of the warrants issued in 1855 and 1856 are withheld from presentation at the Treasury until provision is made for the payment of the interest which has accrued upon them. The appropriation of \$10,000, made in March last for such interest, has already been exhausted upon the warrants redeemed during 1858, and it is recommended that a similar appropriation be made, which it is believed will suffice to discharge all the remaining liabilities of this description.

The statement of the City Comptroller exhibits the entire funded debt of the city to mature after the 1st of January, 1859, to be \$20,338,705 31—of which amount \$3,173,432 52 are of five per cent., and \$17,165,281 79 of six per cent. loans. In addition to such amount the sum of \$86,368 42 has already matured, but had not been presented for payment.

This amount of \$20,338,705 31 will be increased by the loan of \$200,000 authorized for the construction of culverts, but not yet issued.

Of this amount of indebtedness there will fall due in 1860 \$945,234 64, and in 1861 \$448,108 55, for the payment of which some other provision must be made then by resort to the investments of the Sinking Funds and their accumulations.

By the report of the Commissioner of the Sinking Funds provided for the redemption of the city debt it will appear that nine several accounts have been opened for as many distinct loans, and that to each respectively is credited the amount appropriated for its redemption under the terms of the ordinance by which it has been created.

The amount standing to the credit of each Sinking Fund on the 1st of January, 1859, was as follows:

	Loans.	Cash.
Loan of \$10,000,000	\$166,993 74	\$7,466 79
" 1,000,000	41,800 00	54 63
" 800,000	20,500 00	10 05
" 96,900	4,200 00	76 50
" 675,000	27,100 00	55 75
" 1,050,000	35,300 00	47 25
" 100,000	2,400 00	34 25
Gas Works, loan	38,400 00	4,526 00

\$336,693 74 \$12,271 22

No appropriation has yet been received to the sinking fund of the recent loan of \$450,000.

The most careful estimate that can be given by

the Receiver of Taxes makes the gross amount, \$2,806,896 88, from which \$40,000 must be deducted for exempted estates and \$117,298 43 for the discount allowed to tax payers, which makes the revenue from taxation for 1858 \$2,549,598 45.

The ordinance fixing the rate of taxes for 1858 at one dollar and eighty-five cents on the hundred dollars of assessed value, was approved February 12th, and the books of the Receiver were opened March 8th for payment thereof.

The receipts from that date to the end of the year were \$2,019,712 25, leaving \$529,886 20 outstanding on the 1st of January, 1859, or nearly 20 per cent. of the entire tax levy, of which there has since been received to the 22nd instant, \$224,059 96 to avoid additional charge of 5 per cent. imposed by legal process for collection.

The amount of discounts allowed to tax payers during the past year, as previously stated, was \$117,298 43, or about 4½ per cent. of the taxes.

During the past year the average daily supply of water has reached 18,738,153 gallons, being an increase of 1,428,835 of such previous average. New water pipes have been laid to the length of 67,293 feet, exceeding the extent in any former year.

The receipts of the Water Department in 1858 amounted to \$457,518 48, and its expenditures to \$186,570 58, leaving a profit of \$270,947 90, applicable to the general expenses of the city.

The profits of this department have always exceeded those of any other branch of the government, and have since consolidation been steadily increasing. They amounted in 1855 to \$131,141 35; 1856, \$212,981 64; 1857, \$224,820 29; 1858, \$270,947 90.

The entire amount of unredeemed loan issued for the construction of water works is now but \$672,700.

The total valuation of real estate and of personal property assessed for taxation for municipal purposes for 1859, is \$155,697,669, of which the personal property amounts to \$2,697,433.

The number of taxables in the entire city is stated at 103,850.

The rental of property belonging to the city and not used for public purposes, together with other revenue collected by the Commissioner of City Property, has amounted during the past year to \$27,618 63. The various expenditures for repairs and improvements of the public buildings and squares have been \$82,434 65.

The probable receipts from the rental of markets and wharves, is estimated for the present year at about \$105,000.

#### Sixth Avenue Railroad.

At the election of the Sixth Avenue Railroad, held on the 2d inst., the following gentlemen were chosen Directors: Messrs. Sidney Mason, Frederick de Peyster, George R. Howell, Samuel S. Bowman, Waldo Hutchins, John B. Hall, A. Goldsborough Jones, John Q. Jones, Wm. H. Marcy, Chas. H. Marshall, Richard Mortimer, Lorillard Spencer and Francis A. Livingston.

#### Finances of Kansas.

EXTRACT FROM THE GOVERNOR'S MESSAGE.

The estimated value of the taxable property of the Territory is \$25,000,000.

The Commissioner of Claims, arising from the enforcement of the Territorial laws, reports that claims to the value of \$301,225 11 were presented for examination, on which \$254,279 28 were awarded, \$38,942 90 of this being on public, and \$215,311 38 on private claims.

On the 23d of December last, the debt of the Territory was \$19,000, and the assets \$33,946, including the assessments for five counties for the year 1858.

About three million acres of land have been sold and pre-empted in the various districts; of this amount, 1,196,127-59 acres were located in the Delaware, and 1,195,442-68 in the Leocompton Land District, the remainder in other districts.

## Railway Share List,

Compiled from the latest returns—corrected every Wednesday—on a par valuation of \$100.

NAME OF COMPANY.	Length of Road	Capital paid in	Debt	Total cost of road & equip't	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares	NAME OF COMPANY.	Length of Road	Capital paid in	Debt	Total cost of road & equip't	Gross Earnings for last official year.	Net Earnings for do.	Dividend for do.	Price of Shares	
Atlantic & St. Lawrence	149	2,494,900	3,482,000	6,028,911	545,782	150,224	6	---	Brunswick and Florida, Ga.	30	151,887	463,643	518,649	In progr.	---	---	---	---
Androscog & Kennebec	56	457,909	1,836,304	2,210,947	169,513	83,368	none	---	South Western	143	1,399,100	441,292	2,269,323	368,214	208,771	9	---	---
Kennebec & Portland	72	1,107,526	1,763,738	2,871,264	219,255	---	none	---	Tennessee and Alabama	30	899,754	626,889	879,006	53,775	29,406	---	---	---
Portland, Saco & Portland	51	1,396,400	---	1,359,373	263,717	120,909	6	93	Tennessee and Mississippi	61	757,40	611,812	1,161,152	161,001	99,38	---	---	---
Boston, Concord & Montreal	93	1,000,000	1,104,586	2,104,586	32,767	174,025	16	---	Memphis and Charleston	287	2,228,177	3,496,288	5,674,470	642,022	334,504	---	---	---
Concord	36	1,500,000	8,242	1,412,576	817,0	125,664	6	50	Mobile and Ohio	306	6,784,89	2,066,459	10,701,428	554,382	278,428	---	---	---
Concord & Passumpsic Riv.	82	3,068,400	406,286	3,068,400	309,800	166,996	4	47 1/2	Miss Central	59	1,576,474	926,796	2,603,098	115,679	---	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	South'n (Miss.)	82	1,000,000	1,400,000	2,400,000	264,250	150,79	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	N. O. Opelousas & G. W.	40	2,800,000	750,000	3,775,55	284,178	127,450	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	N. O. Jackson & G. N.	206	4,050,000	1,816,610	7,142,56	189,003	---	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Vicksburg, Shreveport & Tex.	21	853,796	103,285	992,061	---	---	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	East Tennessee and Ga.	111	1,192,974	1,735,669	2,708,429	227,363	104,992	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	East Tennessee and Va.	130	626,076	1,728,664	3,203,135	61,3	39,062	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Nash. and Chattanooga	159	2,263,905	1,832,791	3,130,315	641,552	219,26	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Covington & Lexington	98	1,345,850	3,095,917	4,091,064	426,408	220,906	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Lexington and Frankfort	29	430,655	156,899	658,255	95,807	45,71	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Lexington and Danville	13	694,444	71,000	765,500	---	---	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Louisville and Frankfort	65	741,039	625,216	1,502,095	245,750	109,059	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Atlantic & Gt. Western	---	866,939	77,94	613,231	---	---	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Bellefontaine and Ind.	118	1,874,996	1,315,237	2,993,392	348,352	120,886	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Clev., Col., and Cin.	141	4,744,3	90,40	4,762,307	1,497,741	511,740	9	53	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Cleveland and Toledo	200	3,333,712	4,225,659	7,193,016	930,292	413,790	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Clev. and Mahoning	65	---	---	1,920,993	In progr.	---	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Clev. and Pittsburg	133	2,780,744	3,043,992	6,837,466	881,877	309,518	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Clev. P. & A. & A. & A.	95	3,000,000	1,495,548	4,040,978	1,251,533	581,454	15	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Cin., Hamilton & Dayton	60	2,155,800	1,826,092	3,130,315	487,42	260,763	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Cin., Wm. & Zanesville	131	2,421,178	3,782,040	6,696,210	223,606	30,28	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Columbus and Xenia	55	1,490,455	149,000	1,582,475	403,212	181,688	10	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Dayton, Xen. & Belpre	63	437,838	422,658	860,496	In progr.	---	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Dayton and Michigan	140	1,076,602	393,011	1,185,282	In progr.	---	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Dayton and Western	35	310,000	700,481	1,035,173	125,940	65,253	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Dayton and Hamilton	42	469,763	332,669	1,176,164	140,936	50,008	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Little Miami	65	2,981,282	1,266,000	3,925,15	77,444	290,123	10	82	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Sandusky, Dayton & Cin.	171	2,697,000	3,368,005	6,065,090	682,614	---	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Central Ohio	138	1,279,917	6,224,662	6,496,822	570,092	164,697	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	P. & T. Ft. Wayne & Chicago	123	6,247,040	9,822,550	14,779,704	1,646,359	577,787	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Pittsburg, Mayv. & Cin.	50	371,350	31,000	390,933	---	---	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Sand'y, Mans. & Newk.	127	1,350,000	2,206,357	3,562,357	328,958	164,479	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Scioto & Hocking Valley	56	403,975	609,050	888,858	In progr.	---	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Springf., Mt. Vernon & P.	113	1,000,000	950,000	2,194,000	In progr.	---	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Tol., Washash & St. Louis	242	2,965,100	7,577,500	10,542,600	Recently opened.	---	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Cin., Log. & Chicago	255	4,196,679	1,006,125	2,080,433	In progr.	---	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Evansville & Crawfordsv.	109	984,061	1,270,872	2,158,713	249,868	124,140	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Ind. and Cincinnati	88	1,688,809	1,564,581	3,029,989	491,743	245,622	7	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Indiana Central	66	612,350	1,261,179	1,909,911	368,189	204,086	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Ind., Clev. & Pittsburg	83	835,791	107,694	1,826,426	253,19	85,248	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Jeffersonville	71	1,014,252	694,000	1,839,576	222,737	94,318	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Madison and Indianapolis	87	1,647,700	1,336,816	2,984,516	280,214	118,628	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	New Albany and Salem	288	2,636,121	5,281,948	7,029,494	645,827	371,402	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Penn. and Indianapolis	73	---	868,314	2,000,000	150,000	90,000	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Terre Haute and Ind.	73	1,361,450	1,500,125	1,585,899	481,274	206,079	10	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Chicago and Rock Isl'd	182	6,244,000	1,734,318	6,628,272	1,886,196	850,039	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Chicago, Burl. and Quincy	210	4,611,540	3,825,970	8,042,426	1,605,167	81,767	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Chic., St. Paul & F'd du Lac	178	2,300,000	1,352,000	3,625,000	In progr.	---	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Galena and Chicago	259	6,023,900	3,899,015	9,395,455	2,316,708	1,192,042	6	61 1/2	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Illinois Central	704	6,556,435	20,311,402	25,437,669	2,293,966	565,972	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Peoria and Oquawka	181	1,569,889	2,200,000	5,400,000	In progr.	---	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Ohio & Miss. (W. Div.)	147	1,780,295	3,292,403	4,870,586	Recently opened.	---	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Terre Haute, Alt. & St. Louis	208	3,011,150	1,925,927	8,726,764	823,767	247,757	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Detroit and Milwaukee	185	835,791	1,076,994	1,966,969	Recently opened.	---	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Mich. Central	282	6,057,840	8,366,639	12,847,238	2,248,718	734,945	8	40 1/2	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none	---	Mich. South'n & N. Ind.	475	8,874,400	10,459,63	19,336,044	2,309,487	544,311	---	---	---
Concord & Burlington	90	1,000,000	800,000	1,784,146	177,588	73,401	none											



## Railroad Bonds.

NAMES OF COMPANIES. (The following quotations are as interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Alabama and Tennessee River	\$838,000	1st mortgage, convertible	7	1st Jan. 1st July	N.Y.	1872	80	
Buffalo and State Line	500,000	Do. convertible	7	April, October	"	1866	92 1/2	
Bellefontaine and Indiana	600,000	Do. convertible	7	Jan'y, July	"	1866	75	
Do. do.	200,000	Real estate, convertible	7	Jan'y, July	"	1865		
Do. do.	200,000	Income, guar. Cl. Col. & Cin.	7	Feb'y, August.	"	1869		
Central Ohio	1,250,000	1st mort. conv. east. sec.	7	Divers	"	1861-64	60	70
Do. do.	800,000	2d do. convertible	7	March, Sept.	"	1865	60	55
Cincinnati, Hamilton, and Dayton	500,000	1st mortgage convertible	7	20 Jan. 20 July	"	1867	90	92
Do. do.	465,000	2d do. do.	7	May, Novemb.	"	1880	76	77
Cincinnati and Marietta	2,500,000	1st mortgage, conv. till 1862	7	Jan'y, July	"	1868		
Cincinnati, Wilmington, and Zanesville	1,300,000	Do. convertible	7	May, Novemb.	"	1862	95	96
Cleveland, Painesville, and Ashtabula	567,000	Do. convertible	7	Feb'y, August.	"	1861	87 1/2	78
Cleveland and Pittsburgh	800,000	Do. convertible	7	Feb'y, August.	"	1860	80	55
Do. do.	1,200,000	Do. on Branches	7	March, Sept.	"	1873	75	80
Cleveland and Toledo	525,000	Do. convertible	7	Feb'y, August.	"	1863		55
Chicago and Mississippi	800,000	Do. conv. till 1867	7	April, October	"	1862-72		65
Do. do.	1,200,000	Do. convertible	7	April, October	"	1867	80	55
Covington and Lexington	400,000	Do. do.	6	March, Sept.	"	1875	47	55
Do. do.	1,000,000	2d mortgage, convertible	7	April, October	"	1861	88	89
Delaware, Lackawanna, and Western	1,500,000	1st mortgage, do.	7	March, Sept.	"	1875	77	78
Florida Freehold	1,500,000	Do. not convertible	7	April, October	"	1861		73
Fort Wayne and Chicago	1,250,000	Do. conv. till 1863	7	Jan'y, July	"	1873	98 1/2	99
Gaens and Chicago	2,000,000	Do. convertible	7	Feb'y, August.	"	1863	90 1/2	90 1/2
Do. do.	2,000,000	2d mortgage, do.	7	May, Novemb.	"	1875		
Great Western (Illinois)	1,000,000	1st mortgage, do.	10	April, October	"	1868	87 1/2	93
Green Bay, Milwaukee, and Chicago	400,000	Do. convertible	8	10 April, 10 Oct.	"	1863		
Jeffersonville	300,000	Do. 2d sec. inconv.	7	April, October	"	1873		85
Indiana Central	600,000	Do. convertible	7	May, Novemb.	"	1866		85
Indianapolis and Bellefontaine	450,000	Do. do.	7	Jan'y, July	"	1860-61	70	80
Indianapolis & Cin'ti (for Lawb. & U. M.)	500,000	Do. conv. till 1867	7	March, Sept.	"	1866	77	85
La Crosse and Milwaukee	950,000	1st mort. 1st sec. conv. till 1864	8	May, Novemb.	"	1874	73	84
Lake Erie, Wabash, and St. Louis	3,400,000	1st mortgage, conv. till 1869	7	Feb'y, August.	"	1865	81	82
Little Miami	1,500,000	Do. inconv.	6	2 May, 2 Nov.	"	1863	93 1/2	94
Michigan Central	1,000,000	No mortgage, convertible	8	April, October	East.	1860	91 1/2	93
Do. do.	600,000	Do. do.	8	March, Sept.	"	1869	64	65
Milwaukee and Mississippi	600,000	1st mort. 1st sec. conv. till 1857	8	Jan'y, July	N.Y.	1862	70	77 1/2
Do. do.	650,000	Do. 2d do. 1858	8	April, October	"	1863	75	78
Do. do.	1,250,000	Do. 3d do. 1860	8	June, Decemb.	"	1877		
New Albany and Salem	500,000	Do. 1st section	10	April, October	"	1865-62		90
Do. do.	2,325,000	Do. oth. sec. con. till 1858	8	May, Novemb.	"	1864-75		85
Northern Cross	1,200,000	1st mortgage, convertible	8	Jan'y, July	"	1873		85
Ohio and Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1867		75
Ohio and Pennsylvania	1,750,000	Do. do.	7	Jan'y, July	"	1865-66		60
Do. do.	2,000,000	Income, convertible	7	April, October	"	1872	101 1/2	102
Pennsylvania (Central)	5,000,000	1st mortgage, conv. till 1860	6	Jan'y, July	Phila.	1880		75
Racine and Mississippi	680,000	Do. conv. sink'g f'd	8	Feb'y, August.	N.Y.	1875		
Scioto and Hocking Valley	300,000	Do. 1st sec. conv.	7	May, Novemb.	"	1861		
Steubenville and Indiana	1,500,000	Do. convertible	7	Jan'y, July	"	1865		
Terre Haute and Indianapolis	600,000	Do. do.	7	March, Sept.	"	1866		
Terre Haute and Alton	1,000,000	Do. do.	7	Feb'y, August.	"	1862-72	65	70

NAMES OF COMPANIES. (The following quotations include the accrued interest.)	Amount of Loan.	Description of Bonds.	Rate Int.	Interest payable.	Where payable.	Due.	Offered.	Asked.
Baltimore and Ohio	1,128,500	Mortgage	6	Jan'y, July	Balt.	1875	84	85
Chicago and Rock Island	2,000,000	1st mortgage, conv. till 1858	7	10 Jan. 10 July	N.Y.	1870	92 1/2	93
Erie Railroad	3,000,000	1st mortgage	7	May, Novemb.	"	1867	95	97
Do. do.	4,000,000	2d mortgage, convertible	7	March, Sept.	"	1869	87	89
Do. do.	6,000,000	3d mortgage	7	March, Sept.	"	1863	75 1/2	76 1/2
Do. do.	6,000,000	4th mortgage not convertible	7	April, October	"	1860	59	60
Do. do.	4,000,000	Not conv. Sink Fund, \$420,000	7	Feb'y, August.	"	1875	43 1/2	44
Do. do.	4,351,000	Convertible Inscription	7	Feb'y, August.	"	1871	40	41
Do. do.	3,500,000	Convertible	7	Jan'y, July	"	1862	40	41
Hudson River	4,000,000	1st mortgage, Inscription	7	Feb'y, August.	"	1869-70	101	102
Do. do.	2,000,000	2d do. do.	7	16 June, 16 Dec.	"	1860	94 1/2	95
Do. do.	5,000,000	3d do. convertible	7	May, Novemb.	"	1870	73	74
Illinois Central	17,000,000	Mortgage, inconvertible	7	April, October	"	1870	87	85
Do. (Free Land)	3,000,000	Mfg 345,000 acrs-priv. 7 shar's	7	March, Sept.	"	1860	90	91
Michigan Southern	1,000,000	1st mortgage, inconvertible	7	May, Novemb.	"	1860	87	88
New York and Harlem	1,900,000	Do. do.	7	May, Novemb.	"	1861-72	91 1/2	92
New York and New Haven	750,000	No mortgage, do.	7	June, Decemb.	"	1855-60	96	98
New Haven and Hartford	1,000,000	1st mortgage, do.	6	Jan'y, July	"	1873	90	94
Northern Indiana	1,000,000	Do. do.	7	Feb'y, August.	"	1861	85 1/2	86 1/2
Do. Gothen Branch	1,500,000	Do. do.	7	Feb'y, August.	"	1868	74 1/2	76
New York Central	8,287,000	No mortgage, do.	6	May, Novemb.	"	1863	91 1/2	92 1/2
Do. do.	3,000,000	No m'g conv. from June 57-59	7	15 June, 15 Dec.	"	1864	101 1/2	102 1/2
Panama, 1st issue	900,000	Convertible till 1856	7	Jan'y, July	"	1866	115	
Do. 2d do.	1,478,000	Do. till 1858	7	Jan'y, July	"	1866	90	91
Reading	1,573,000	Mortgage, inconvertible	6	Jan'y, July	Phila.	1860	83 1/2	84
Do. do.	1,300,000	Do. convertible	6	Jan'y, July	"	1870	81	83 1/2
Do. do.	3,469,000	Do. inconvertible	6	April, October	"	1886	73	74

CITY SECURITIES.	Int't payable.	Off'd	Asked	CITY SECURITIES	Int't payable.	Off'd	Asked
New York, 5 per ct. 1868-70	98	99		Milwaukee, 7 per ct coup.	X	Divers	50
Do. 5 do. 1870-75	92	94 1/2		New Orleans, 6 per ct. cp. R.R.	X	Do.	72
Do. 6 do. 1883	102 1/2	103		N. Orleans, 6 per ct. cp. municip.	X	Jan'y, July	87
Do. 6 do. 1890-98	91	92		Philadelphia, 6 per ct. 1876-98	X	Jan'y, July	99 1/2
Albany, 6 per ct. coup. 1871-81	105	106 1/2		Pittsburgh, 6 per ct. coup.	X	Divers	50
Alleghany, 6 per ct. coup.	X	55	70	Quincy, 8 per ct. coup.	X	Jan'y, July	62 1/2
Baltimore, 6 per ct. 1879-90	X	98	100	Racine, 7 per ct. coup.	X	10 Feb'y, Aug.	80
Boston, 6 per ct. coup.	X	100 1/2	101	Rochester, 6 per cent. coup.	X	Divers	90
Brooklyn, 6 per ct. coup. Long	X	101 1/2	102	St. Louis, 6 per ct. coup. Long	X	Do.	85
Clev'rd, 7 per ct. cp. W.W. 1879	X	100	103	Do. do. Municipal	X	Do.	87
Cincinnati, 6 per ct. coup.	X	90	95	Sacramento, 10 p. ct. 1862-74	X	Do.	37
Chicago, 6 per ct. coup. 1873-77	X	85	86	S. Francisco, 7 p. ct. 1865, pay. N.Y.	X	May, Novemb.	60
Do. 7 per ct. coup. 1880	X	98	99 1/2	Do. 10 p. ct. coup. 1871	X	Do.	80
Detroit, 7 per ct. cp. W.W. 1873-78	X	100	102	Do. 10 do. pay. N.Y.	X	Jan'y, July	65
Dubuque, 8 per ct. cp. Long	X	99 1/2	100	Do. 6 per ct. pay. N.Y. 1875	X	Do.	60
Jersey City, 6 p. ct. cp. W.W. 1877	X	99 1/2		Whoeing, 6 per ct. coup.	X	Divers	50
Lehigh Valley, 6 per ct. cp. 1880-83	X	72	73	Do. 6 p. ct. cp. Mun. 1874	X	March, Sept.	80
Memphis, 6 per ct. coup. 1882	X	65	66 1/2	X	April, October		

## Cincinnati Stock Sales.

By KIRK &amp; CHEEVER.

For the week ending February 7, 1869.

BONDS.	Per cent.
Little Miami, 1st Mort.	68 1/2
Covington and Lexington, 1st Mortgage	68 1/2
Do. do. 2d do.	68 1/2
Ohio & Miss., E. D., Construction	78 1/2
Cinc. Ham. and Dayton, 1st Mortgage	78 1/2
Do. do. 2d do.	78 1/2
Indianap. & Cincinnati, do. do.	78 1/2

## STOCKS.

Cincinnati, Hamilton & Dayton	54 1/2
Columbus and Xenia	81
Indianapolis & Cincinnati	83
Little Miami	83 1/2
Ohio and Mississippi (E. D.)	8

## Bank Statements.

The Bank movement in the four principal cities of the Union, in which weekly reports are made, as shown by their last statements, is as follows:

LOANS	DEPOSITS	SPROIN.	CIRCULAT'N.
N. Y., Feb. 5	\$130,412,176	\$91,955,566	\$25,991,441
Boston, " 7	59,120,000	20,815,800	7,814,600
Philad., " 7	26,472,569	17,007,167	5,979,439
N. Ori., Jan. 29	21,837,911	24,346,761	16,101,158
Total	\$237,872,665	154,164,984	55,836,638
Last week	236,403,105	156,601,706	55,032,898

## Railroad Earnings.

The receipts of the Harlem Railroad for Jan'y are as follows:

1858	\$79,123 71
1859	91,990 20

Net increase.....\$12,866 49

The business of the Illinois Central Railroad for January was as follows:

## Land Department.

Acres Construction Lands sold	3,546.94	for \$40,804 99
Acres Interest Fund Lands sold		for 12,826 32
Acres Free Lands sold	788.56	for 12,826 32

Total sales during the month.....4,335.50 for \$53,631 31  
To which add Town Lot sales..... 508 90

Total of all.....\$54,140 21  
\*Acres s'd pr'v'sly, 1,229,835.38 for 15,637,148 95

Total.....1,234,170.83 for \$15,691,289 16

Cash received in January, 1859.....\$35,677 98  
Do. do. 1859..... 54,155 98

Construction Bonds canceled in January, 1859.....\$36,000  
Do. canceled previously..... 927,000

Free Land Bonds canceled in January, 1859.....\$4,000  
Do. canceled previously..... 123,000

Total Bonds canceled up to January 31, 1859.....\$1,090,000

## Traffic Department.

Receipts from passengers	\$53,953 52
Do. freight	63,424 86
Do. mails	6,358 33
Do. rent of road	5,633 38
Do. other sources	2,356 87

Total receipts in January, 1859.....\$131,736 41  
Do. do. 1858..... 127,861 27

\* Total net sales, after deducting cancellations made previous to January 1, 1859.

The traffic of the Great Western Railway of Canada, for the week ending 28th of Jan'y, 1859, was as follows:

Passengers	\$13,842 49
Freight and live stock	12,651 64
Mails and sundries	1,373 02

Total.....\$27,867 15  
Corresponding week, 1858..... 88,991 46

The following figures show the receipts of the Long Island Railroad for January, 1859:

Passengers .....	\$10,347 06
Freight .....	9,115 96
Mail .....	685 42

Total .....

January, 1858.....

Increase .....

The receipts of the New York and New Haven Railroad for January, 1859, were as follows:

Passengers .....	\$71,115 38
Freight .....	13,000 00

Total .....

Due other roads .....

Total .....

Receipts for January, 1858 .....

Increase .....

The receipts of the Grand Trunk Railway of Canada for the week ending January 22, were .....

Week ending January 23, 1858.....

Decrease .....

Total traffic from July 1st. ....

Same period last year .....

Decrease .....

The following is a comparative statement of the earnings of the Little Miami and Columbus and Xenia Railroad for Jan.:

1859 .....

1858 .....

Gain .....

This does not include the receipts from the Dayton, Xenia and Belpre Railroad Co., now worked by the Little Miami Co.

The business of the Michigan Southern road in January was:

January, 1858.....

January, 1859.....

Decrease .....

The earnings of the Galena and Chicago Railroad Company for January were:

	1858.	1859.	Decrease.
Freight .....	\$55,225 09	\$38,085 25	\$17,139 84
Passengers .....	26,866 59	23,171 33	3,595 26
Mails, &c.. ..	3,328 26	3,000 00	328 26

Total .....

Corrected earnings for the previous month.....

The earnings of the Cincinnati, Hamilton and Dayton Railroad Co. were:

January, 1859.....

January, 1858.....

Increase .....

This Company have paid off their floating debt in full from the earnings of the road, and expect to be able to resume cash dividends by April next.

The following are the earnings of the North Pennsylvania Railroad:

For January, 1859.....

For January, 1858.....

Increase .....

The earnings of the first two months of the fiscal year were .....

Same time last year .....

Increase .....

The Hudson River Company earned in January \$192,161 against \$176,572 same month last year.

The gross receipts of the Erie road in January were \$493,000, showing a large nominal falling off—some \$130,000.

The January earnings of the Chicago and Fond du Lac road, were \$18,568 51, against \$20,446 82 in January, 1858, and \$15,790 75 in January, 1857.

## American Railroad Journal.

Saturday, February 12, 1859.

### Delano's New Method of Burning Coal.

We had an opportunity, last week, of visiting Messrs. Corning & Winslow's iron works, at Troy, in company with a party of iron manufacturers, for the purpose of witnessing the working of *Delano's improved method* of burning coal.

Without describing the manner in which he introduces the coal into the furnace or combustion chamber, we will merely say that it is supplied from *beneath*, by a very simple and effective contrivance. Assuming this part to be accomplished, the following are some of the advantages that have been always predicated of such an improvement, but which has never been successfully effected, until the use of Mr. Delano's contrivance.

The first thing gained by this mode of feeding, is the combustion of the gaseous matter which all coal contains, which we will assume to be 20 per cent. of their heating or evaporating power. To burn these gases, great heat, and a free supply of oxygen, are necessary. In the ordinary mode of feeding upon the *top*, these conditions can only partially concur. In supplying the raw coal, it is necessarily thrown with considerable force upon the ignited mass, packing it to a greater or less extent, thereby cutting off the free supply of air. Just in proportion as this is shut off, is combustion imperfect. In supplying raw coal in any manner to a fire, the first process is a distillation of its gases. The carbon which may be said to form the basis of the coal, cannot be brought into a high state of combustion till these are completely expelled. The fact may be familiarly illustrated by reference to the experience of any person who uses a furnace in warming his house. On the supply of new coal, a free draft must be allowed through the smoke-pipe, or the inmates will almost instantly be choked with coal gas. Very little heat results, or in other words, only partial combustion takes place till the gases are expelled. This is not thoroughly accomplished till the whole mass is brought to a white heat. The draft may be then shut or checked with impunity.

The gases thrown off, and which are so offensive when allowed to find their way into the house, are well known to be highly combustible. Could they be burnt, or, to state the process in a different manner, could they be decomposed into their constituents, and allowed to form new combinations, they would be not only innocuous, but the whole power of the coal would be utilized. This statement, however, does not express the entire loss from the *non-consumption* of the gases. The process of distillation or evaporation is well known to be the most cooling in nature, as any one can readily demonstrate by dropping a little ether into his open hand. The first duty the fire beneath the raw coal is called upon to perform, is to distil it. The next to expel the product in vapor. These duties consume a certain portion of the effective power of coal fed in the ordinary

manner, and diverts so much from the object to which it is directed.

Now it is easy to see that this waste might, to a considerable extent, be saved, if coal could be supplied to a fire from *beneath*. By this process the grate would be kept clean, and allow the free passage of air. The gases evolved would ascend with the air, through the super-incumbent mass of intensely ignited carbon, and the conditions requisite to the perfect combustion of the gases—a high degree of heat and an abundant supply of oxygen—would meet. They are fully supplied by Mr. Delano's improvement, as a slight inspection of its working demonstrates. Assuming, therefore, that he does accomplish the result claimed, a result better by 20 or 30 per cent. than the ordinary one of feeding *upon*, instead of *underneath*, the burning mass, is secured. In the old process, constant attention and labor is required to keep the grate bars and fire sufficiently clean to allow combustion to proceed at all. In puddling furnaces and in steamships, the fire has to be drawn every given number of hours, for the purpose of removing the cinders and earthy matter that have accumulated. All the incombustible matter the coal contains, settles upon the grate, and unless removed, would soon form a compact and impervious bed. But by feeding from *beneath*, all this foreign matter very soon ascends to the surface of the fire, whence it can be readily drawn. The body of the fire never has an amount of cinder or ashes mixed with it, sufficient to check free combustion. By Mr. Delano's process, a fire may be continued uninterruptedly for six months, if desirable. The owners of puddling furnaces and rolling mills will readily appreciate this advantage. Such is the result obtained at Messrs. Corning & Winslow's works. The fires are at all times in good order, always in condition for the most effective duty required of them. Two additional heats, therefore, are obtained every 24 hours, increasing the daily product over the old process some 20 per cent.

Another advantage gained in the Eastern States by the use of Delano's improvement, is the substitution of *anthracite* for *bituminous* coal. The former, we believe, is preferred at the works of Messrs. C. & W., at the same price for the two. To most of the iron establishments in the Eastern States anthracite comes all the way from one to two dollars cheaper than bituminous. We are informed that at the works referred to, a careful comparison of the product of furnaces working with bituminous coal on the old plan, and with anthracite coal with Mr. Delano's improvement, showed a saving equal to 2-80 per ton in favor of the latter in the cost of coal alone.

Another advantage claimed and admitted to a certain extent, is the superior quality of the iron produced. One of the difficulties in using anthracite in the ordinary way, is the *scaling* of the coal when first thrown upon the fire. The scales are taken up by the draft, and carried into the puddling chamber, and mix with the melted iron, and, of course, affecting its purity. By Delano's process this is entirely prevented. In his furnace the raw, or black coal, never finds its way to the top of the fire. The heat descends to it so slowly that it does not fly or disintegrate. The mass, or lump fed, preserves its form, and does not get to the top of the fire till thoroughly ignited. The



fire, consequently, always works clean, and very little enters the puddling or heating chamber, but the pure caloric, which is the only agent required in the manufacture of iron—all other ingredients brought by the blast into contact with the iron being positively injurious.

Such are some of the advantages that seem inferable from the successful application of any process that supplies coal from beneath. We believe the result on Messrs. Corning & Winslow's works have demonstrated that all of them have been obtained by the use of Mr. Delano's contrivance. These gentlemen have nine fires at work with it, and are introducing it upon others as fast possible. We believe we may say that the result obtained has not only far exceeded their expectations, but that it gives entire satisfaction. We think we may safely say that the introduction of this improvement constitutes an era in the history of the iron manufacture, as it is equally useful with bituminous as with anthracite. It is very easily applied, the whole apparatus being composed of cast iron, and costing for the largest class furnaces, not over \$100. A model drawn to a scale may be seen at the office of the JOURNAL, and further information obtained by addressing Mr. Delano, either at this city, or Syracuse, in this State.

**The Commercial Bearings of the Treaty between "the Four Great East and West Lines."**

It is well known that the N. Y. Central, Erie, Pennsylvania, and Baltimore and Ohio Railroads, have mutually entered into agreements to charge uniform rates between Boston and New York, and all points in the Western States. Without discussing the wisdom of such an agreement in the abstract, it certainly threatens to work great mischief to the trade of these cities. The four roads, for instance, charge the same rates on merchandise taken over either of them, or the lines of which they are a part, between New York and Indianapolis; but the Pennsylvania Company is the sole judge of what it shall charge between Philadelphia and Indianapolis. The difference in the rates between this point, and Philadelphia and New York, is just so much discrimination against the merchants of the latter city.

Such discrimination is now being made use of with great effect against its trade. Whatever effect it may have, it is well calculated to create a widespread discontent among our own merchants. But if it be injurious to them, it is equally so to the New York roads. If a premium be offered to the Philadelphia merchants, equal to the difference in the cost of transportation, an equal premium is offered to the Philadelphia road. Only place the rates from New York sufficiently high, and its merchants and roads would be without any business, as far as the West is concerned. When a compact like the one referred to borders so nearly on the absurd, there will be likely to be some fallacy in it, however applied.

Competition for business may be a very bad thing, but it will always be found difficult to prevent it by compacts, where a large number of roads compete. They are impossible among merchants and carriers, generally. Merchants thrive by reducing expenses when business is dull. The action and necessity of one can be no rule for another. It is so with manufacturing establishments.

Each goes on its own hook. It would be one of the most fatal things in the world should they enter into an agreement that for any article manufactured, a stipulated price should be asked. It would be the stepping-stone to indolence, prodigality and unthrift. Under such an agreement, there would be an end to all progress and enterprise. Yet manufacturers prosper without seeking to protect themselves against each others' imprudence and necessities.

But if competition is to be avoided by compacts, we certainly think that these should be between companies that are strictly rivals, as are the New York Central and Erie. To these the Baltimore and Ohio, and Pennsylvania Railroads, are rivals only to a very limited extent. But if the latter choose to come here, and bid for our trade, all the better for our city. This is to be regarded as well as our railroads. But admitting all to be rivals of each other, the better way in the end will be to leave each company to follow out its own policy. None of them will, in the long run, do business at a loss. If they have sense enough to make contracts with other, to keep rates at a living point, they will soon discover sense enough to act up to such a standard without such contract. If managers can be trusted in one case, they can in the other. By leaving each company free, this will be the result in the end—fair rates of charges, founded on experience of what it should be, to be remunerative. This is the necessary standard to which all must come at last. It is the natural one. A costly experience may be necessary to establish it; but the sooner the experience be entered upon the better. Artificial standards, having no reference to the absolute cost of transportation, are just like false principles, and not only must be abandoned in the end, but are mischievous while in practice. It is simply putting all roads on the same footing, making the strong carry the weak. But if a road have no inherent strength of its own, it ought to go down, and not, like a drone, be a needless tax upon public industry. Let each road act in view of its own necessities and strength, and it will not be long before a policy will develop itself, which will produce the best possible result for each line.

**London Correspondence.**

26, THROGMORTON STREET, }  
LONDON, 21st January, 1859. }

To the Editor of the AM. RAILROAD JOURNAL.

SIR—You will see by the London daily papers that our political horizon is greatly overcast, but as the Austrian Government has wisely deferred to the opinions of other European Councils, in one important event, and there can be little sympathy between a liberal constitution and the Emperor of the French, Austria will probably retain her influence and power in Italy; at least for the present. Yet the uncertainty as to the result has had a great effect upon the English Money Market, and has checked the improving enquiry for good investments—paying a fair rate of interest, which was noticed upon the reduction of the Bank rate of interest. Sound American Securities were receiving a fair share of attention; and but for the depreciated price of Illinois Central Securities, some of the United States Railway Bonds would have materially advanced. The British public does not understand American Railways, nor does it seek to form an opinion founded only upon sim-

ple truths. The opinion of any great talker is readily adopted, and great talkers being seldom deep thinkers, a superficial knowledge is all that is obtained. Another Illinois Central, or Grand Trunk of Canada Railway may be introduced, and as eagerly supported and as generally condemned, as the Illinois Central with its extensive land grant has been, within the past two years. Who, with any sound knowledge of the character of the Illinois Central Railway, could have felt satisfied in recommending the purchase of the company's shares, when the Directors were carrying a floating debt of over \$3,000,000, and received but an insignificant amount from sales of land, and when it was known there must be an annual loss in working the line, assuming interest to be a charge upon that working, and when a large amount of money had to be provided to complete the road. Yet, then, the shares were eagerly sought for at over 30 premium. Now, the true position of the company is making itself known, and the stockjobbing scheme of creating new shares for increasing the payment of the higher call is better understood. Yet there is lesser difference in the financial position of the company. The floating debt, which, one day or another, must be paid, has been paid, and the interest saved;—the completion of the road, which was indispensable, has progressed, and the receipts from land sales appear to have equaled 50 per cent. of the amount due, which, in the opinion of many well informed persons, is as much as might have been expected, considering the nature of many of the early sales. Only one unforeseen event has occurred, and that was the crisis of 1857; but as its effect cannot have reduced the estimated improving traffic, or prevented payment of bills for land more than equal to the sum received, it cannot be supposed that if such an event had not occurred, the traffic of 1857 and 1858 would have netted \$3,000,000 more than has been realized; or that the Land Notes would have produced more than an additional \$1,500,000; and yet the differences in the present market value of the share capital of the company, as compared with the selling price of the shares in March, 1857,—about the time when 1856 report was issued,—is over \$64 per share, and that upon 255,000 shares is more than \$16,000,000.

I am aware of using the increasing capital for estimating the total difference, but assumed the decrease of shares would be greater if a smaller number had been affected by pressure of sales. Either the high premium or the heavy discount must be wrong. The premium was not justifiable in connection with the financial position of the Company at that time, and the present discount indicates a want of knowledge of the prospects of the Company, as indicated by the most reliable reports. On Wednesday last I read a paper before a meeting of shareholders of this Company, showing that the cost of the road had not been excessive, although I fear it is at present far from completed for a heavy traffic; particularly from want of ballast;—that, provided the later sales of land have averaged, in locality, the sales up to 1st April, 1857, the sales of land were extremely satisfactory, as a fair proportion of out-lying lands from the road had been sold; so that the unsold land may be expected to realize a return equal to that for the lands sold; and that the traffic of 1857, as compared with 1856, presents most favor-

able features, particularly in those sections in which the Company has the greatest quantity of land. This undertaking is a land scheme, and one not of the very highest order; or the lands near to and along the Main line, would not have been excluded from the grant to the Company. It was doubtless pre-empted when the authorities made over the number of acres required by the charter, but how much earlier? It must have been an ill-judged design to project a line through pre-occupied land, when, from the sale of the lands through which the line was to pass, the cost of building the road was to be obtained; or the line was projected to further the view of speculation in land which, in knowledge of its location, had been already secured. Yet the land the Company has is valuable, and as the bonded debt of the Company could be supported by a call of \$5 per share per annum, if all shareholders paid up, the future prospect of the road is of a higher value than that indicated by the price of the shares, provided we have faithful reports; and upon analysis, they appear to be correct.

The London committee of shareholders are reported to have borrowed £150,000 for one year, at 7 per cent. commission; but had they made a call, the value of the shares would probably have advanced. The loan being made known, they declined in value.

The market for American securities is very quiet; the depositors in the Joint Stock Banks are growing tired of the low rate of interest they obtain, but American securities are not obtaining even a fair share. State Stocks are more in request than the best of railroad bonds; and in shares there is a far greater disposition to sell than to buy, the only exception being in favor of New York Central. Six per cent. United States Bonds are 100a102, and the five per cent. bonds 94a95; Maryland 5 per cent. sterling bonds are quoted 95a97; Ohio 5 per cent. stock, 95a97; Pennsylvania 5 per cent. bonds, 85a86 ex-coupons; Virginia 6 per cents, 84a86. In Railway bonds, Illinois Freeland have advanced 1 per cent.—they are 81a83; and Michigan Central bonds are firmer, without much doing in them; the 1860 and 1869 are 85a87; Michigan Southern sinking fund bonds are 65a70; New York 7 per cents. continue 93a95; sinking fund bonds, 90a92; Erie 3d mortgages have been done at 70, and are quoted 69a71; Pennsylvania Central 1st mortgages are 90a92; 2d mortgage sterling, 92a94; Philadelphia and Reading 1st, 86a88; 2d, 76a78. The quotations for shares are as follows:—Illinois Central, 35a33; Michigan Central, 45a50; Michigan Southern, 20a25; New York Central, 79a80; New York and Erie, 15a17; Pennsylvania Central, 38a40; Philadelphia Reading, 23a25; Consols close at 951a4.

Yours truly, &c.,

WILLIAM LANCE.

In speaking of the land grant of the above road, our correspondent makes a mistake, which we will correct. The general government granted to the road one-half of *all* the unsold lands within 15 miles of the road. The Company adopted, as far as possible, the route that could give them the greatest amount of land. A considerable portion of the public lands in the State had been sold before the grant to the Company was made. If the scheme is a land speculation, it is of the *highest* order, when compared with similar schemes, as

the full complement of lands was obtained; and these are of the most fertile description, remarkably favorably situated.

#### Railroads in the United Kingdom.

The number of miles of railroad in operation in the United Kingdom, on the first day of January, 1859, from which returns were received, were 9,016. The total gross earnings for the past seven years have been as follows:

Years.	Mileage.	Earnings.
1852.....	6,915	£15,150,310
1853.....	6,944	16,845,531
1854.....	7,308	18,541,855
1855.....	7,692	20,243,151
1856.....	8,404	22,493,601
1857.....	8,676	20,682,465
1858.....	9,016	23,263,764

To the above mileage should be added 552 miles of road from which no returns were published. The cost of the 9,016 miles of road was £306,950,000; of the 552 miles, £9,900,000—making a total of £315,950,000, equal to \$1,529,198,000.

#### Northern Central Railroad.

The annual meeting of the stockholders in this road was held in Baltimore on the 2nd inst. The fourth annual report of the Company was presented by the President, ZENUS BARNUM, Esq. From this we learn that the receipts from operations of the road for the fiscal year ending December 31st, were:

From Passengers .....	\$212,912 08
" Freight .....	575,004 34
" Mails, etc. ....	27,456 96
	\$815,373 38

And the working expenses were:

Transportation expenses.....	\$230,863 53
Repairs of cars .....	24,862 53
Do. engines .....	39,316 31
Do. machinery .....	20,647 06
Do. road .....	76,073 15
Do. bridges .....	5,494 07
Do. engine and station houses, etc. ....	3,981 39
Salaries .....	10,519 70
General expenses .....	11,064 20
	422,821 94

Net revenue.....\$392,551 44

To which add—

Int. on bds. of W. Y. & G. R. R. 3,195 00	
" debt " " 1,969 39	
Div. on stock " " 3,490 30	
	8,654 49
	\$401,205 13

Less disbursements, viz:

Int. on Co's bonded debt.....	\$282,915 00
Interest on bonds and debt of W. Y. & G. R. R. ....	5,964 39
Dividends on stock, do. ....	6,975 10
Sinking fund for do. ....	8,896 42
Accidents, etc. ....	8,041 34
	311,992 25

Leaving as surplus profits .....

The receipts of the road show an increase of \$79,068 23 as compared with the previous year.—This increase is altogether attributable to the facilities offered to trade and travel, by the opening of the road to Sunbury, while the working expenses of the road for the same period are at the rate of 51.85 per cent. on the gross income, showing a decrease of 9.43 per cent. as compared with those of the past year.

The balance sheet shows that the company has expended during the past year for the completion

and improvement of the road, the following sums:

For completion of road.....	\$565,485 21
" rolling stock.....	115,654 22
" real estate at Sunbury.....	1,500 00
" sinking fund Wrightsville road ...	17,000 00

Total.....\$719,639 43

Derived from the following sources:

Loan No. 7, issued during the year. ....	\$458,500 00
Increase of outstanding liabilities.....	121,487 51
Decrease of funds.....	16,141 02
" investments .....	21,436 00
" materials on hand.....	2,861 02
Surplus revenue.....	89,243 88
	\$719,639 43

The work of constructing the Sunbury and Erie Railroad to the city of Erie is now progressing rapidly. The President of that company gives assurance of their ability to open the entire line from Sunbury to Erie in about twenty months, and that ample means are in hand to accomplish so desirable a result. When this event takes place an entire new source of revenue will be added to the receipts of this company from the trade of the lakes, and the vast country which that work will open up to commerce—a country rich in minerals and the products of the forest, and which must find their outlet through this road to Baltimore and Philadelphia, diverging at Harrisburg over the Reading and Pennsylvania Railroads, to the latter city.

The importance of a perfect system of telegraph on the line of a railroad, is no longer a question of doubt. Thus impressed, the Board authorized the construction of a line from Bridgeport to Sunbury, which will be completed by the first of March. This, working in connection with the line in operation from the former point to Baltimore, gives the company all the telegraphic facilities required.

Since the organization of this company, a period of four years, no accident has occurred whereby a passenger has lost his life, nor has any passenger suffered an injury, not attributable to his own negligence.

The President states that the obstacles to the completion of the Canton Division of the road passing to tidewater will be shortly removed, so far as the grades of the street are concerned. The Mayor of the city has taken such steps as must bring the difficulties to a successful conclusion, and that too without compromising the interests of the city or the rights of the company. The Philadelphia Turnpike Road claimed \$20,000 damages for permission to the railroad to cross the turnpike below Canton, and subsequently the claim was increased to \$45,000. A jury of condemnation fixed the damages at \$3,500; this sum was offered but declined by the turnpike company. In the meantime measures were adopted for the completion of the wharves at Canton, and that part of the track adjacent thereto, in order to connect the same with the Philadelphia, Wilmington and Baltimore Railroad, and with the company's city track, and thus secure an outlet for coal, so important to both the city and the company.

The work connected with, and necessary to perfect this substitute, will be finished in a few days, when cars can be run daily from the mines to the Company's wharves; and it is confidently be-



lied a capacity for transportation and shipment of coal from the port of Baltimore may be then realized, equal to 200,000 tons per annum. It is proper here to state that this desirable result could not have been accomplished but for the liberal spirit of accommodation manifested by Samuel M. Felton, Esq., the President of the Philadelphia, Wilmington and Baltimore Railroad Company.

The Board are of the opinion that this temporary expedient will be ample to accommodate the coal trade, which may be offered for shipment during the year.

The necessity of diverting a portion of the funds applicable to the sinking funds, in order to extend the road to Sunbury, is regarded as having been essential to the interests of the company and the city, but when the revenues become sufficient the punctual contribution to these funds should be considered as a charge upon the annual expenditures of the company, to be paid in advance of any dividend of the profits of each year.

The Board congratulate the citizens of Baltimore and the stockholders of the company, on the completion of their road to Sunbury. This was accomplished on the 1st of August, 1858, when trains were regularly run from the coal regions of Pennsylvania to Baltimore, and from Baltimore, in connection with existing roads, to the Lakes.

The report concludes with the following expression of opinion as to the future prospects of the company :

The commercial and manufacturing advantages to be obtained through the medium of this road are incalculable, requiring only an application of the energy and capital of our citizens to be enjoyed.

The prospects of the future may be fairly drawn from the success which has attended the management of the road for the last three years. Relying on this and the probable receipts which are to be derived from the extension of your road to Sunbury, estimated by the Chief Engineer, in his report to the President and Directors of the Susquehanna Railroad Company, as likely to reach the sum of \$813,000, which, added to the existing revenue on the line from Harrisburg to Baltimore, sustained by the restoration of the internal commerce and manufacturing pursuits of the country, indispensable, to the success of the work, the Board feel no hesitation in re-assuring the stockholders that all these just expectations may be fully realized, under a wise and economical management of their property.

The company now own 42 engines; 26 passenger; 3 excursion; 9 baggage; 789 coal, and 811 freight cars.

The number of miles run by all the engines during the year was 606,482, at a cost of 6.48 cts-per mile.

The receipts per mile run for tonnage between Baltimore and Sunbury amounts to 1.62 cts., from passengers to 1.06 cts.

The tonnage of merchandise in 1858 was 268,704; in 1857, 288,262—decrease 19,558 tons.

Tee number of tons of coal carried in 1858 was 165,153; in 1857; 110,319—increase 54,834.

The number of passengers carried in 1858 was 278,832; in 1857, 228,254—increase 50,577.

The gross receipts from burden transportation in 1858, \$575,004 34; in 1857, \$533,761 06—increase \$41,243 28.

The gross receipts from passenger transportation

in 1858, \$235,599 58: in 1857, \$197,774 63—increase, \$37,824 95.

There have been added during the year, 8 engines, 213 coal, 39 freight, 5 passenger, 2 baggage, 10 gondola and 6 lumber track cars.

CONDENSED BALANCE SHEET.

### Resources :

Cost of road and appurtenances .....	\$6,893,457	39
Cash and cash items .....	95,257	84
Bonds of the W. Y. & G. R. R. Co. ..	62,000	00
Debt of the " " " " ..	31,662	20
Stock in " " 3,173 shs. ..	125,765	37
Stock in Northern Central Railway Co., 4,848 shares. ....	242,400	00
Bonds of the Susq. and Tide-Water Canal Co. ....	537	00
Sinking Fund for Loan of \$150,000— No. 1 .....	43,555	00
Sinking Fund for Loan of \$2,500,000 —No. 7. ....	31,234	99
Sinking Fund for the W. Y. & G. R. R. Co. ....	38,000	00
Materials on hand .....	69,964	49
	<u>\$8,681,556</u>	<u>88</u>

## Liabilities:

Capital Stock .....	\$2,260,000 00
---------------------	----------------

*Loans secured by mortgage:*

No. 1. Coupon Bonds of the late Balt. & Susq. R.R.Co., issued for rolling stock, redeemable 1st. Oct., 1866. Interest payable quarterly . . . . .	150,000 00
No. 2. Loan from the State of Maryland in lieu of previous loans to the B. & S. R. R. Co. Interest quarterly . . . . .	150,000 00
No. 3. 1st mortgage coupon bonds of the late Y. & C. R. R. Co., issued for the completion of the road, redeemable 1st of May, 1870. Interest semi-annually . . . . .	175,000 00
No. 4. 2d mortgage coupon bonds of the late Y. & C. R. R. Co., issued to contractors for the completion of the road, redeemable 7th Jan. 1871. Interest semi-annually . . . . .	25,000 00
No. 5. Bonds of the late Y. & C. R. R. Co., issued in aid of the Susq. R. R. Co., and guaranteed by the city of Baltimore, redeemable 1st Jan. 1877. Interest semi-annually. . . . .	500,000 00
No. 6. Contract bonds of the N. C. R. R. Co., issued "for work done for the Susq. R. R. Co., prior to 9th Dec., 1854," redeemable 16th Jan., 1875. Interest quarterly. Loan \$300,000. Issued . . . . .	292,300 00
No. 7. Bonds of the N. C. R. R. Co., issued for construction of the road from Bridgeport to Sunbury and Tide-Water, Canton, redeemable 1st July, 1885. Interest semi-annually. Loan \$2,500,000. Issued. . . . .	1,903,500 00
From city of Baltimore, which, on completion of the railway, reverts to this company . . . . .	850,000 00
Outstanding liabilities . . . . .	655,507 10
Profit and loss—surplus profits . . . . .	370,249 78
	<hr/>
	\$8,681,556 88

The following gentlemen were elected directors for the ensuing year:

*President*—JOHN S. GITTINGS.

*Directors*—Adam Denmead, William T. Walters, James Frazier, William Devries, J. H. Reiman, Peter Mowell, William D. Miller, W. E. Mayhew, Amos E. Kapp, Simon Cameron, Alex. Small, Wm. Colder, Jr.

*Directors on the part of the City*—Aaron Hoffman, Chas. Geo. Ridgely.

*General Sup't and Engineer*—A. B. Warford.  
*Treasurer*—J. S. Leib.

## The Delaware Lottery Bill.

This bill passed the Senate on the 26th by a vote of five to four, having previously passed the House by ayes twelve, nays eleven, a majority of one in each house. It goes into immediate effect, and grants to Richard France, Esq., of Baltimore, the privilege of drawing lotteries and selling lottery tickets in that State for the period of twenty years, in consideration of which he is to pay a bonus of \$27,000, to be devoted to building railroads, churches, school houses, water works, &c., in the State.

The bill also contains the following appropriations:—\$106,000 to the extension of the Delaware Railroad; \$114,000 to the Maryland and Delaware Railroad; \$74,000 to the Mispillion and Choptank Railroad; \$48,000 to the Frederica Railroad; \$276,000 to the Junction and Breakwater Railroad; \$10,000 to the Murderkilt Navigation Company; \$10,000 for an Academy at Felton; \$10,000 to improve Duck creek; \$10,000 to stop the mouth of old Duck creek; \$10,000 to improve Leipsic creek; \$2,000 for an academy at Concord; \$5,000 for a granary at Townsend station; \$4,000 for a Methodist Protestant church at Townsend; \$11,000 for the school districts of Appoquinimink Hundred; \$3,000 for fencing the Delaware Railroad in Newcastle county, and \$27,000 to build a court house at Newcastle.

### Dayton and Michigan Railroad.

The prospects of this road are now in a very flattering condition. This connection is now the only one required to make our Railway system complete. The Michigan Southern Company have agreed to take \$150,000 of its bonds, to be paid out of the earnings of the road after its completion. The Cincinnati *Gazette* also gives us some gratifying information. That paper says the Board of Directors of the Cincinnati, Hamilton and Dayton Company have also agreed to take \$300,000 of the bonds—on the same terms—subject, however, to the action of the stockholders. The latter will undoubtedly confirm the arrangement, as it will require no expenditure of money on the part of the company. The bonds thus to be negotiated, will be available for the purchase of iron, and their redemption will be provided for by setting apart a portion of the earnings from the new business thrown on to the C. H. & D. Road, by the opening of the Dayton and Michigan Road to Toledo, where it will connect with the road now in operation from Toledo to Detroit. The means thus to be provided will enable the D. & M. Co. to finish their road at an early day, opening a direct line between Cincinnati and Detroit.—*Detroit Tribune*.

**Phoenix Iron Works.**

This company, who have kept their works in operation during the panic, have 11 steam engines, in the aggregate 10.31 horse power—3 water wheels of 90 horse power, make altogether 1,21 horse power. They have at the time 5 single puddling furnaces, and foundations for 8 more. 20 heating furnaces; 9 trains of rolls, with 20 pair of rolls; 3 rotary squeezers and an alligator. They are prepared to make styles and weights of rails, from 20 pounds to 75 pounds per yard. Girders for houses, from 6 inches to 10 inches deep. Round iron from 5-16 to 6½ inches in diameter. Square iron from 5-16 to 4½. Flat iron from 5-8 to 11½ inches wide. Also T, angular and irregular shaped iron. In addition to the rolls mentioned in trains, they have at least 200 pairs of rolls on hand ready for use, and make a larger range of sizes, and a greater variety of shapes than is made at any other mill in the United States. The company are now getting houses cast that will weigh 7 tons each, for erecting three high rolls, for making girders, railroad iron, &c. They are also going to enlarge and increase the power of the engines, sufficient to drive the increased power of the works. Independent of the above, the company have three blast furnaces in successful operation, driven by a powerful engine.—*Phenix*.

**Railroad Dividends.**

The Third Avenue Railroad Company has declared a dividend of \$2 50 per share, payable on the 9th inst.

The New York and New Haven Railroad a dividend of three per cent., payable on the 16th inst.

The Oswego and Syracuse Railroad Company usual half-yearly dividend of four per cent., payable on the 20th inst.

The Pennsylvania Coal Company has declared a semi-annual dividend of 3½ per cent., payable on the 15th inst.

The New York Central Railroad Co. a semi-annual dividend of 4 per cent. payable on the 21st inst.

**Insurance Dividends.**

The St. Nicholas Insurance Company have declared a semi-annual dividend of five per cent., payable on demand.

The Irving Insurance Company a semi-annual dividend of 7 per cent. payable on demand.

The Northwestern Insurance Company a semi-annual dividend of ten per cent., payable on the 15th inst.

The New York Fire and Marine Insurance Company a semi-annual dividend, payable on demand.

The Lorillard Fire Insurance Company a semi-annual dividend of eight per cent. payable on demand.

The Mercantile Mutual Insurance Company, a dividend of 11 per cent., payable on the 14th inst.

The Niagara Insurance Company, 10 per cent. payable on demand.

The Indemnity Fire Insurance Company, a semi-annual dividend of 5 per cent. payable on demand.

**Interest on Bonded Indebtedness.**

The Coupons on Clinton County, Ohio, Bonds will be paid by presenting them at the Clinton County Bank, in Wilmington, Ohio, on the first Monday in March, 1859, with current rate of exchange on New York on that day, so far as the funds for that purpose will go.

Holders of the First Mortgage Bonds of the Sackett Harbor and Ellisburg Railroad are informed that the dividend arising from the sale of said railroad, will be paid on demand, upon the presentation and surrender of the Bonds and Coupons to the Trustee at the office of Messrs. Schuchardt & Gebhardt, No. 21 Nassau st.

**Bank Dividends.**

The United States Trust Company a semi-annual dividend of three and a-half per cent., payable on the 10th inst.

The City Bank of Brooklyn a semi-annual dividend of three and a-half per cent. payable on the 12th inst.

The Oriental Bank a semi-annual dividend of 3½ per cent., payable on the 10th inst.

The Citizens' Bank has declared 4 per cent., payable on the 12th inst.

**Banks of All the States.**

The reports of the Banks of the United States made nearest to Jan. 1, 1859, show numbers, specie and circulation as follows:

No. of Banks.	Specie.	Circulation.	Deposits.
1854..1,208	59,410,253	204,689,809	188,188,744
1855..1,307	53,944,545	186,952,223	190,400,342
1856..1,398	59,314,063	195,747,950	212,705,662
1857..1,418	58,349,838	214,778,822	230,351,352
1858..1,438	74,412,832	155,208,314	185,982,049
1859..1,560	102,974,127	156,148,897	278,411,697

**Bank of England.**

The return from the Bank of England for the week ending the 19th January, gives the following results, when compared with the previous week:

Public deposits.	£6,260,269	Increase	...£741,527
Other deposits.	14,948,727	Decrease	... 777,081
Rest.....	3,248,430	Increase	... 34,329

On the other side of the account:

Gov. Securities.	£10,698,807	Unchanged.
Other Securities.	16,507,901	Decrease ... £56,293
Notes unempl'd.	12,044,485	Increase .... 88,550

The amount of notes in circulation is £20,991,185, being a decrease of £88,980; and the stock of bullion in both departments is £19,186,269, showing a decrease of £6,081, when compared with the preceding return.

**ISSUE DEPARTMENT.**

Notes issued	.....	£33,035,670
Government debt	.....	£11,015,100
Other securities	.....	3,459,900
Gold coin and bullion	.....	18,560,670
		—£33,035,670

**Mechanics, Manufacturers & Inventors.**

THE SCIENTIFIC AMERICAN, a journal of Mechanical Art, Science, and useful information. All the prominent new inventions are illustrated with handsome engravings in this paper. Official list of all new patents granted, with the claims published every week. \$2 a year. Sent by mail everywhere. MUNN & Co., publishers, No. 37 Park Row and 145 Nassau st., Park Buildings, N. Y.

**Notice to Inventors.**

ORSON D. MCNN, Solicitor of American and Foreign Patents, No. 37 Park Row, and 145 Nassau st., N. Y., "Scientific American" office. Circulars of advice sent free.

**Inventors' Patent Agency.**

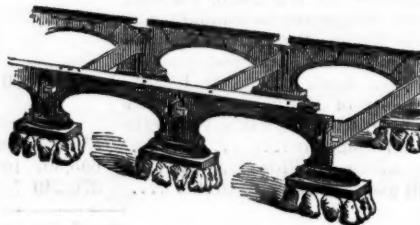
SALEM H. WALES, Solicitor of American and Foreign Patents, No. 37 Park Row, and 145 Nassau st., N. Y., at the "Scientific American" office. Circulars of advice sent free.

**Inventors Take Notice.**

ALFRED E. BRACH, Solicitor of American and Foreign Patents, No. 37 Park Row, and 145 Nassau st., N. Y., at the "Scientific American" office. Circulars of advice sent free.

**BEERS' CAST-IRON ENDLESS RAIL, FOR CITY RAILROAD;**

Now being laid in Philadelphia and elsewhere; This road is exclusively of cast iron, without tie, string-piece, or chair; Rail 85 to 100 lbs. per yard; Durability four fold over the present roads, with 65 lbs. groove rail; And with a saving on first cost; effecting a reduction in current yearly repairs, and relays, of at least \$1,000 per mile.



Also,—

**BEERS' ELASTIC IRON RAILWAY, FOR LOCOMOTIVE USE;**

This road can be built and equipped, without additional cost over a road with 55 lbs. T rail; saving not less than 60 per cent on motive power, 50 per cent on dead weight, and 80 per cent on repairs of way; thus reducing the yearly expenses from \$1,500, to \$2,000, per mile. For full particulars, with drawings, relating to both roads, see a recent Treatise, entitled "Railroads, their construction and management, with the remedy; from twenty-five years experience, by S. A. BEERS, Civil Engineer, BROOKLYN, N. Y. Price 50 cts. Address the author.

The undersigned is prepared to construct, by contract, the above roads, in any part of the U. S. or Europe, at the shortest notice, being aided by a staff of contractors of the most extensive experience.

S. A. BEERS.

**JAMES C. LANE,**

Ex-Chief Engineer of Explorations in South-America, &c. MECHANICAL AND CONSULTING ENGINEER, Times Building, 41 Park Row. Room No. 4, NEW YORK.

**PATENTS NEGOTIATED.**

DRAWINGS Specifications, and Models (metal or wood) Applications for Patents, and all business whatever connected with Patents attended to with economy and despatch. Application for PATENT, including drawings, specifications and Patent Office fees, \$60.

**FINANCIAL.****G. M. TRACY & CO., STOCKS, BONDS, ETC. LOANS NEGOTIATED.**

No. 49 EXCHANGE PLACE, NEW YORK.

**EUGENE THOMSON, STOCK AUCTIONEER AND BROKER, No. 64 WALL ST., NEW YORK.**

AUCTION SALES OF STOCKS AND BONDS every THURSDAY, at 12½ o'clock, at the Merchant's Exchange, RAILROAD BANK, INSURANCE and other SECURITIES bought and sold at the Brokers' Board, at Private Sale, or at Auction. All dividends payable in New York collected, and prompt remittances made.

NONE BUT BONA FIDE QUOTATIONS FURNISHED THE PRESS. THE MARKET VALUE OF SECURITIES WILL NOT BE SUPPRESSED OR ALTERED, AND DECEPTIVE OR IRRESPONSIBLE CATALOGUES WILL NEVER BE ISSUED.

A statement showing the capital, dividend months, and last semi-annual dividend of the Banks and Insurance Companies of the city of New York, will be forwarded by mail upon application.

REFERENCES.—Messrs. Wm. and Jno. O'Brien, Thos. Denny & Co., Horace Greeley & Co., Cragin & Co., Todd & Co., J. & C. Berrian, Geo. F. Nesbitt & Co., Eugene Plunkett, E-q., (President Excelsior Ins. Co.), John C. Storm, E-q., (President Lenox Ins. Co.), L. G. Irving, Esq., (Secretary Niagara Ins. Co.), Marcus Spring, Esq., Oliver H. Lee, Esq., John H. Gri-com, M. D., Rev. Edwin F. Hatfield, D. D., Rev. Theo. L. Cuyler, John Camerden, Esq., Benj. F. Manierre, Esq., New York; Otis Allen, Esq., Albany N. Y.; Messrs. Gorham & Co., Providence, R. I.

**A. H. DYETT, STOCK AND BOND BROKER, No. 43 EXCHANGE PLACE, NEW YORK.****PETERS, CAMPBELL & CO., BANKERS AND DEALERS IN DOMESTIC EXCHANGE AND BANK NOTES, No. 50 WALL STREET, NEW YORK.****SPECIAL ATTENTION GIVEN TO COLLECTIONS IN ALL PARTS OF THE UNITED STATES.**

PETERS, SPENCE & CO., Lynchburg, Va. D. T. C. PETERS, } DAVID E. SPENCE, N. H. CAMPBELL, } DEXTER OTEY.

REFER TO JAS. T. SOUTER, Esq., Pres't B'k Republic, } New York City American Exchange Bank. Banks and Bankers, Richmond and Lynchburg, Va.

**KETCHAM & WILLIAMS, STOCK BROKERS,**

No. 1 HANOVER STREET, NEW YORK. Near Wall, Stocks and Bonds bought and sold on Commission, and Loans negotiated. 6m9

**H. MEIGS, Jr. & SMITH, BANKERS and BROKERS, 39 WILLIAM STREET,**

(FIRST BUILDING BELOW WALL STREET.) STOCKS and BONDS Bought and Sold on Commission. MERCANTILE PAPER and LOANS Negotiated. INTEREST ALLOWED ON DEPOSITS. HENRY MEIGS, Jr. WM. ALEX. SMITH. New York, May 11, 1858.



# W. P. STEELE & CO., BANKERS, 23 WILLIAM STREET, NEW YORK.

STOCKS and BONDS Bought and Sold on Commission.  
Mercantile Paper and Loans negotiated.  
Advances made on all approved Securities.  
COLLECTIONS MADE throughout the United States and  
Canadas.

A. T. MILLS. D. W. C. JUDAH.  
To Railroad COMPANIES & CONTRACTORS.

**MILLS & CO.,**  
55 EXCHANGE PLACE.  
Negotiate RAILROAD BONDS and STOCKS.  
PURCHASES of Railroad Equipments made upon  
order, for moderate commissions.

**MORSE & CO.,**  
BANKERS and DEALERS in Stocks, Bonds, Exchange  
and Commercial Paper, on commission. No. 49 Wall  
street, and 41 William street, NEW YORK.  
Orders for the purchase and sale of Stocks and Bonds, at the  
Brokers' Board, by letter or otherwise, promptly executed.  
Cash advanced on sound saleable securities.

REFER TO  
G. VAN BAUR & CO., N. Y. CONTINENTAL B'K. N. Y.

**R. H. RICKARD,**  
MINING AGENT & STOCK BROKER,  
Office No. 21 Nassau st., NEW YORK.

**B**UYERS and sells MINING SHARES, MINES and  
MINERAL LANDS on commission, will examine  
Mines and Mineral Lands in any part of the United States, and  
report on their value, etc., etc.

REFERENCES:—P. Clouteau, Jr., & Co., New York and St.  
Louis, the Hon. Wm. M. Gwin, U. S. Senator, the Hon. C. A.  
Peabody, N. Y., the Hon. Sam. F. Butterworth, N. Y., Frost  
& Forrest, Com. Mer's N. Y., John F. Butterworth, Esq., N. Y.,  
G. O. Williams & Co., Detroit, Mich., Capt. D. Tyler, Norwich,  
Conn., Kittenhouse, Faint & Co., Bankers, Washington, D. C.  
Particular attention given to Lake Superior business.

**DINGEE & HOLDEN,**  
AUCTIONEERS and REAL ESTATE BROKERS,  
No. 9 NASSAU STREET,  
Under Messrs. DUNCAN, SHERMAN & CO.  
SOLOMON DINGEE. NEW YORK.  
CHARLES E. HOLDEN, }  
Stocks, Bonds, Mortgages, & Commercial Paper Bought & Sold.

REFERENCES.  
Citizens' Bank, N. Y. Hon. E. D. Campbell, Lt. Gov.,  
Messrs. Thompson Bros., Wis.  
Bankers, Hon. Judge L. rd, La Crosse,  
Messrs. Sewell, Ferris & " Jno. M. Levy, Banker, "  
Co. Hon. Franklin Steele, Minne-  
Geo. P. Rogers, Esq., sota.  
A. Gridley, President McLean A. & W. A. Saunders, Bankers,  
Co. Bank, Illinois. Mt. Pleasant, Iowa.

**SIMEON DRAPER, Auctioneer.**

**By SIMEON DRAPER,**  
Office, No. 36 PINE ST., NEW YORK.  
**REGULAR AUCTION SALES**  
AT THE MERCHANTS' EXCHANGE EVERY DAY.  
**STOCKS and BONDS** bought and sold at private sale.  
Sale every day at 12 1/2 o'clock. See Catalogue.

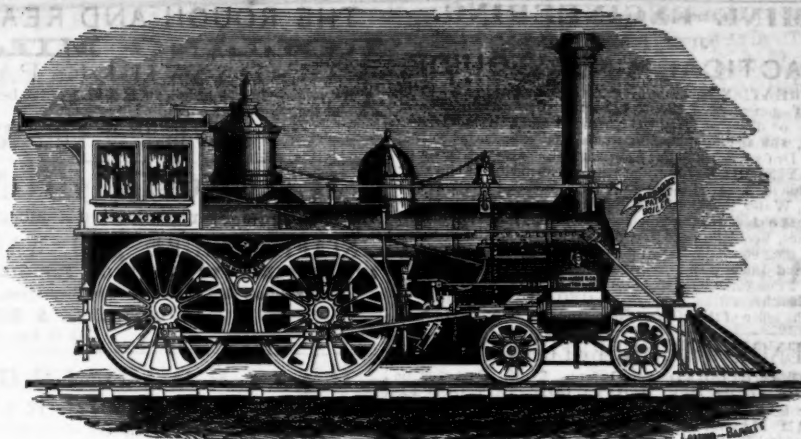
CINCINNATI STOCK EXCHANGE.  
**KIRK & CHEEVER,**  
Stock Brokers and Railroad Agents,  
NO. 83 WEST THIRD STREET,  
CINCINNATI, OHIO.

Railroad Stocks, Bonds, &c., bought and sold on commission.  
Regular sales at public auction at the MERCHANTS' EXCHANGE.

**DUNCAN, SHERMAN & CO.,**  
BANKERS,  
Corner Pine and Nassau Sts., NEW YORK.

CIRCULAR NOTES and LETTERS OF CREDIT,  
For travelers, available in all the principal cities of the world.  
ALSO, MERCANTILE CREDITS,  
For use in EUROPE, CHINA, etc.

**CHAS. A. FISHER,**  
Late of the firm of FISHER, DENNY & CO.,  
No. 18 Exchange Place.  
**STOCKS and Bonds** bought and sold on commission. Loans  
negotiated.



## BOARDMAN COAL BURNING LOCOMOTIVE BOILER COMPANY.

OFFICE FOR THE SALE OF LOCOMOTIVES AND OF RIGHTS TO BUILD AND USE,

110 Broadway, NEW YORK.

J. H. BOARDMAN, Secretary.

**T**HE principal advantages of the **BOARDMAN Coal Burner** over wood engines and other "Coalers," are the economical use and perfect consumption of coal without smoke or sparks and without injury to the fire box or tubing—having a large portion of the weight near the track—the tubing by its vertical posit on and downward draft can never clog and the introduction of air in a manner causing a perfect mixture and combustion of the smoke and combustible gases. They are **no more expensive** than other Coalers, but little exceed the cost of Wood Engines, and can be had through this Company of Wm. Mason, Taunton, Mass., or other builders, if preferred. **Outside connected Engines** can be altered to this Coal Burner at an expense of from \$800 to \$1,200—thereby saving from \$1,500 to \$2,500 per annum, or a saving of 50 per cent. where a ton of coal and a cord of wood are about the same price. The average duty of a locomotive is 25,000 miles per annum.

OFFICE OF THE NEW JERSEY R. R. & TRANSP. CO.,  
June 1, 1858.

J. P. JACKSON, Esq.  
DEAR SIR:—I am able to report that the two **BOARDMAN BOILER COAL BURNING ENGINES**, the **PHOENIX** and **A. O. ZABRISKIE** continue to be operated successfully. The **PHOENIX**, the first introduced, has run 40,602 miles, averaging 6 to 7 heavily loaded cars and run at a high rate of speed. Average cost per mile 11.2 cents. The **A. O. ZABRISKIE** has now run 11,304 miles, all with the heavy Mal Express train, averaging 7 to 8 cars. Average cost per mile 10.1 cents. The **GOV. PENNINGTON**, a first class wood burning engine (the most economical ever run on this road), is running the alternate trips with the **A. O. ZABRISKIE**, with the same train of cars. Average cost per mile 19 cents. The entire average cost per mile for the wood engines, for the year 1857, is 20.1 cents. The average cost of coal engines, thus far 10.6 cents.

**T. A. HOWLAND & CO.,**  
BROKERS IN  
**RAILROAD IRON**

AND  
**EQUIPMENTS,**  
54 WILLIAM ST., NEW YORK,  
**ARE** prepared to furnish either Foreign or American  
Rails, as Equipments of every kind desired, on  
the most favorable terms.

**REMOVAL.**  
W. D. STARLING, Metal Broker and Rail Inspector,  
Lawrence, Pountney Hill.  
LONDON, 1857.

**Patents for Inventions.**  
**T. D. STETSON**, Agent for procuring patents, No. 5 Tryon  
T. Row, (near City Hall). A circular with full information  
sent free by mail.  
American correspondent *Prac. Mechanics' Jour.* from 1854

The saving has, therefore, been 95 cents, or 47 per cent. All  
of which is respectfully submitted.

J. B. GADDIS, General Assistant.

**NOTE.**—In above coal and wood are estimated on the tender  
at \$3 each.

Mr. J. VAN RENSSALAER, formerly executive assistant on this  
road, says in his certificate, "the consumption of smoke and  
gas is very perfect, and I believe there is less annoyance from  
emissions than from our wood burning engines. The engine I  
think has less lateral motion on the track than any other I ever  
rode on. I have yet to learn that the boiler is more injured  
than from the use of wood. There has been no difficulty in main-  
taining from 85 to 100 lbs. of steam, while running our heaviest  
and fastest mail and express trains."

BOSTON & LOWELL AND NASHUA & LOWELL RAILROADS,  
Superintendent's Office March 4, 1858

I have been acquainted with the Boardman Coal Burning  
Locomotive Boiler for the last three years. I consider it supe-  
rior to any other Coal Burning Locomotive that I am acquaint-  
ed with. The one that we have in use has given entire satis-  
faction in all respects. The following is the cost per mile for  
running with coal for the months of December, 1857, and Jan y,  
1858. The coal costs per 2,240 lbs. on the tender \$4. December  
costs per mile for fuel, 10.61 cents; January costs per mile  
for fuel, 9.86 cents. The wood locomotive to perform the  
same labor (it runs the freight) costs from 18 to 21 cents. The  
wood on the tender costs \$4.75 per cord.

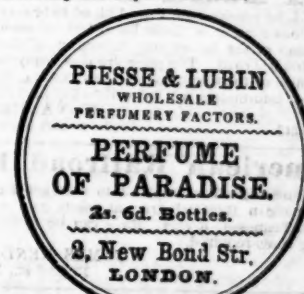
JOHN B. WINSLOW, Supt.

**Statements from other Roads show similar  
facts.**

The **BOARDMAN BOILER** is also used for stationary  
and steamboat purposes, showing durability, safety and a  
savings of 40 to 50 per cent. in fuel. Its expense  
is no greater than that of other Boilers, and with a brick fur-  
nace it is less than that of common Cylinder Boilers.

### CAUTION.

As there are numerous imitations of our **FRANGIPANNI**,  
purchasers are requested to see that the names of **PIESSE**  
and **LUBIN** are impressed upon the Bottles.



Sold by all Fashionable Perfumers and Druggists in the  
World.  
WHOLESALE AGENT FOR THE UNITED STATES:  
Mr. JONAS PHILLIPS, 87 Pearl st., New York

**MINE ENGINEERING.**

JUST PUBLISHED.

**PRACTICAL MINER'S GUIDE,**

A TREATISE on Mine Engineering comprising a set of Trigonometrical TABLES adapted to all purposes of oblique or diagonal, vertical, horizontal and traverse DIALING, with their application to the dial exercise of Shafts, Adits, Drifts, Levels, Sides, Levelling, etc. Also, a treatise on ASSAYING METALS, with tables, which exhibit at one view the value of Assayed Ores; rules for calculating the power of Steam, Water, and Cornish Pumping Engines; quality, manufacture and choice of Cordage and Wire Rope for Mine service; on Gases, Ventilation and Lighting of Mines, Boring Artesian Wells, etc., etc.; together with a collection of essential Tables, Rules and Illustrations, exclusively applicable to Mining Business. Price \$2.25 by mail. Can be ordered of any Bookseller. Published by GEO. M. NEWTON, At the office of the Mining Magazine, No. 1 Spruce st., N. Y.

**ENGINEERING PRECEDENTS.**

JUST PUBLISHED—8vo, 127 pp., \$1.25. Sent free on receipt of the price. ISHERWOOD'S (B. T. Chief Engineer U. S. Navy) ENGINEERING PRECEDENTS for STEAM MACHINERY, embracing the Performances of Steamships' Experiments with Propelling Instruments, Condensers, Boilers, etc., accompanied by Analysis of the same; the whole being of original matter and arranged in the most practical and useful manner for Engineers. H. BAILLIÈRE, No. 250 Broadway.

**Mechanical Books.****RAILWAY MACHINERY;**

A treatise on the Mechanical Engineering of Railways; embracing the Principles and Construction of Rolling and Fixed Plant, in all departments. Illustrated by a Series of Plates on a large scale, and by numerous Engravings on Wood. By DANIEL KINNAR CLARK, Engineer. 2 vols. half-morocco, \$24.

"This work contains the best published information extant upon locomotives. It is recommended to all builders, engineers, and mechanics, as giving more useful, practical, and philosophical instruction at a cheaper rate than could be obtained by the purchase of any other work."—*American Railroad Journal*.

**GRIER'S Mechanic's Pocket Dictionary;**

Ninth edition. Bound, \$2.25.

**GRIER'S Mechanic's Calculator;**

Sixteenth edition. Bound, \$1.38.

**THE ENGINEER AND MACHINIST'S DRAWING-BOOK;**

Illustrated by numerous Engravings on wood and steel. Half-morocco, \$10.50.

"A complete and reliable Work on the draughting of machine work in all its details, exhibiting a high style of art. We are confident that this book will form an important element in the education of our young mechanics."—*Scientific American*.

BLACKIE & SON,  
117 Fulton st.,  
NEW YORK.

2m4

**TO MANUFACTURERS OF CEMENT.**

OFFICE OF THE COVINGTON & OHIO R. R.,  
Covington, Alabama County, Va. Jan'y 3rd, 1859.  
PROPOSALS will be received, at this office, until the 14th of February, 1859, inclusive,—to manufacture one hundred and fifty thousand bushels of hydraulic cement, within a distance of five miles of this place, for use in the masonry now under contract on the line of the Covington and Ohio Railroad.  
Further information may be had by persons desirous of offering proposals, on application at this office on and after the 21st inst.

By order of the Board of Public Works,  
CHARLES R. FISK,  
Chief Engineer.

543

**PROPOSALS**

WILL be received until the 12th of February next for the construction of 3,600 lineal feet of wooden bridging, on the line of the Lynchburg Extension, of the Orange and Alexandria Railroad. The plans are now ready for inspection, at the office of the Company, in ALEXANDRIA, Virginia.

Detailed information will be sent to any parties desiring it.  
H. W. VANDEGRIFT,  
Engineer and General Sup't.

313

**American Railroad Iron.**

THE undersigned is prepared to contract for delivery of American Railroad Iron at points on the Mississippi, Ohio and Tennessee Rivers. Rails can be furnished 27 to 30 feet long when required.

JAMES HENDERSON,  
13 Cliff st., New York.

**Railroad Iron.**

500 TONS 56 lbs. and 1,500 tons 60 lbs. best Welsh make, Erie pattern, now in port for sale.  
T. A. HOWLAND & CO.,  
54 William st., New York.

**THE ROUGH AND READY ROLLING MILLS OF DANVILLE, PA.,**

ARE prepared to fill orders for RAILS of the best quality at the market price.

T. A. HOWLAND & CO., Agents,  
54 William st., NEW YORK.

**RAILROAD IRON.**

The undersigned, Agents for leading Manufacturers in STAFFORDSHIRE AND WALES,

ARE PREPARED TO CONTRACT FOR DELIVERY

On board ship at Liverpool, or Welsh port.

G. CONGREVE & SON,  
18 Cliff st., N. Y.

**RAILROAD IRON. CONTRACTS FOR RAILS,**

AT A FIXED PRICE OR ON COMMISSION,  
DELIVERED AT AN ENGLISH PORT,  
Or at a Port in United States,

WILL BE MADE BY THE UNDERSIGNED,

THEODORE DEHON,  
10 Wall st., near Broadway, New York.  
500 tons T rails on hand 54 to 57 lbs. per linear yard.

**RAILROAD IRON.**

WELSH or Staffordshire make, delivered on board at an English port or at a port in the United States.

NORRIS & BROTHER,  
BALTIMORE.  
And 17 Nassau st., NEW YORK.

**IRON BOILER FLUES.**

Lap-Welded Boiler Flues,  
1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

**Wrought Iron Welded Tubes,**

From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, &c., &c.

MANUFACTURED AND FOR SALE BY

MORRIS, TASKER & CO.,

PASCAL IRON WORKS.

Established 1821.

Warehouse—209 South Third st.,  
PHILADELPHIA.

STEPHEN MORRIS, CHAS. WHEELER, JR.,  
THOS. T. TASKER, JR. STEPHEN P. M. TASKER.

THE

**ROUND OAK IRON WORKS, STAFFORDSHIRE, ENGLAND.**

Lord WARD, Proprietor.

MANUFACTURE RAILS, BOILER PLATES,  
SHEETS, HOOPS and BARS, of every variety of pattern.

NORRIS & BROTHER,  
Agents for the United States,  
12 SOUTH CHARLES STREET,  
BALTIMORE.

And 17 NASSAU STREET, NEW YORK.

**MORRIS & JONES & CO.,**

IRON MERCHANTS,  
MARKET AND SIXTEENTH STREETS,

PHILADELPHIA.

**IRON AND STEEL**

IN ALL THEIR VARIETIES.

BOILER PLATE, OAK AXLES,

BOILER RIVETS, RAILROAD IRON,

OUT NAILS and SPIKES, PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills Furnaces and Forges in this State, orders for any description of Iron can be executed.

August 16, 1854

1783

**Railroad Iron.**

THE undersigned have American and Foreign Railroad Iron for sale, deliverable at New York and other markets.

CASWELL & PERKINS,  
Brokers, 69 Wall st.  
New York, January 1, 1859.

**THE RAILROAD IRON MILL COMPANY, CLEVELAND, OHIO, MANUFACTURERS EXCLUSIVELY OF RAILROAD IRON.**

THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

**Orders are now solicited**

From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.

Apply to

ALBERT G. SMITH,

President of the Incorporation.

February, 1858.

**RAILROAD IRON.**

The Crescent Manufacturing Company,  
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for Rails of any required pattern and weight, and to re-roll old rails, on the most liberal terms.

N. WILKINSON, Sec'y,  
WHEELING, VA.

**RAILROAD IRON.**

THE subscribers are prepared to contract for RAILS delivered at an English port or at a port in the United States. Also for all descriptions of

**RAILROAD EQUIPMENTS**

upon favorable terms.

JOHN W. HULL & CO.,

No. 41 Exchange Place, NEW YORK.

**RAILROAD IRON.**

The Undersigned, Agents for the Manufacturers, ARE PREPARED TO CONTRACT TO DELIVER

Free on Board at Shipping Ports in England, or

At Ports of Discharge in the United States,

RAILS OF SUPERIOR QUALITY,

And of Weight or Pattern as may be required.

VOSE, LIVINGSTON & CO.,

New York Aug. 1, 1855 9 South William Street.

**RAILROAD IRON.**

WOOD, MORRELL & CO.,

Having leased the extensive Works of the

Cambria Iron Company,

Situated at JOHNSTOWN, CAMBRIA CO., PENNA.,

And purchased all their real estate,

ARE now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

Philadelphia Office, } North Penna. R. R. Building,  
No. 407 Walnut st.

**RAILROAD IRON AND COMMON BARS.**

THE UNDERSIGNED,

Sole Agents to Messrs. GUEST & CO.,

The Proprietors of the Dowlais Iron Works,

Near Cardiff, South Wales,

ARE duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

R. & J. MAXIN, 70 Broad st.

**RAILROAD IRON.**

THE RENSSELAER IRON COMPANY,

TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

**OLD RAILS**

received in exchange for new, or for re-manufacturing.

JOHN A. GRISWOLD, Agent,  
TROY, N. Y.

New York Agency:

BUSSING, CROCKER & DODGE,  
32 Cliff St.



## A. BRIDGES & CO.,

# FINDINGS,

MANUFACTURERS AND DEALERS IN  
RAILROAD AND CAR  
OF EVERY DESCRIPTION,  
64 COURTLANDT ST., NEW YORK.

RAILROAD AXLES, WHEELS AND CHAIRS,  
**SPIKES, BOLTS,**  
NUTS, WASHERS,  
CAR, SHIP AND BRIDGE BOLTS.  
IRON FORGINGS OF VARIOUS KINDS, ETC., ETC.  
STEEL AND RUBBER SPRINGS,  
LOCOMOTIVE AND HAND LANTERNS,  
PORTABLE FORGES AND JACK SCREWS,  
COTTON DUCK FOR CAR COVERS,  
BRASS AND SILVER TRIMMINGS.

Also, Sole Agents for the Manufacturers of Car Head Linings.  
Orders for the purchase of goods on commission, aside from  
our regular business, respectfully solicited,  
**ALBERT BRIDGES. JOEL C. LANE.**

F.W. Rhineland. James A. Boorman. Edwin A. Post.  
**RHINELANDER, BOORMAN & CO.,**  
RAILWAY AGENTS  
AND  
COMMISSION MERCHANTS,  
SUPPLY ALL MATERIAL AND ARTICLES USED IN THE  
CONSTRUCTION AND OPERATING OF RAILWAYS.  
BANK OF COMMERCE BUILDING, NEW YORK.

REFER TO  
John A. Stevens, Esq., President Bank of Commerce.  
Sam'l Sloan, Esq., President Hudson River Railroad Co.  
James Boorman, Esq., Messrs. Stillman, Allen & Co.  
Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co.

## RAILROAD SUPPLIES.

## WILLIAMS & PAGE,

No. 44 Water, between Congress and Kilby Streets,  
**Boston, Mass.**

Iron Rails, Chairs, & Spikes,  
FREIGHT AND COAL CARS,  
(on hand or made at short notice.)  
Wheels and Axles of all kinds,  
LOWMOOR, AMES', BOWLING, AND NASHUA TIRES,  
IRON AND STEEL,  
Of all kinds for Shops and Tracks.

Car Trimmings, Paints, Oil, Varnish, Car and Switch  
Locks, Ventilators, Lanterns, Head-Lights, Gauges, Rubber  
Springs, Chairs, Hose and Belting, Ash, Pine and other Tim-  
ber, and ALL MATERIALS USED IN Equipment and Repairs of  
Railroads, Engines and Cars, at lowest prices.

**THOS. S. WILLIAMS, PHILIP S. PAGE,**  
Late Sup't Boston & Me. R. R. Late Page, Alden & Co.  
**REFERENCES.**

JAMES HAYWARD, President, PHILIPS, DODGE & CO., N.Y.  
Boston and Maine R. R. COOPER, HEWITT & CO., do.  
Capt. WM. H. SWIFT, Boston, REEVES, BUCK & CO., Phila.  
E. S. CHESBROUGH, Chicago.  
Phila., W. & B. R. R.

## A. S. & A. G. WHITON

72 PINE ST., NEW YORK,  
DEALERS IN

RAILROAD IRON,  
CHAIRS AND SPIKES,  
LOCOMOTIVES,  
PASSENGER AND FREIGHT CARS.  
MANUFACTURERS' AGENTS

FOR Miller's Iron Turn Tables, Dimpfel's Patent Blower,  
Gardiner's Volute Car Springs and

RAILWAY SUPPLIES GENERALLY.  
ALSO  
NEGOTIATORS OF SECURITIES.

## NEW ENGLAND

## RAILWAY, STEAMBOAT AND TELEGRAPH

## SUPPLY AGENCY.

## HOLT, GILSON & CO.,

5 WATER ST., BOSTON.  
**LOCOMOTIVES, CARS.**

Rails, Sleepers; Chairs, Spikes, Wheels, Axles and Tires.  
IRON AND STEEL OF ALL KINDS.  
BOILER, TUBES AND FELTING.  
**BOLTS, NUTS & WASHERS.**  
LOCOMOTIVE, AND HAND SHIP LANTERNS.

Car Trimmings of all descriptions, Sperm, Whale,  
Lard, Kerosene and Cotton Seed Oils, etc.; Paints and Var-  
nishes; Steam and Water Gauge; Car and Switch Locks;  
Ventilators; Bell Cords; Rubber Springs, Hose and Belting;  
Signal Belts, Machinists' Tools, Gauge Cocks, Oil Cup, etc. etc.  
Sole Agents for TOMMY'S celebrated GAUGE GLASSES,  
and PACKER'S IMPROVED RATCHET DRILL.  
Orders promptly filled at the lowest prices.

**W. H. HOLT. W. H. GILSON.**

## RAILROAD SUPPLIES.

## GILBERT, MURDOCK & CO.,

No. 9 NASSAU STREET,  
**NEW YORK,**

ARE agents for, and prepared to furnish at manu-  
facturers' prices,

## RAILROAD IRON,

## LOCOMOTIVE ENGINES,

## RAILROAD CARS,

## CAR WHEELS,

## AXLES, CHAIRS,

## SPIKES, TOOLS,

## ETC., ETC.

All inquiries in reference to the above articles will  
receive immediate attention.  
New York, January, 1859.

## GEO. M. FREEMAN,

SUCCESSOR TO

## PRATT & FREEMAN,

## PHILADELPHIA

## RAILWAY SUPPLY AGENCY,

No. 123 WALNUT STREET,  
**PHILADELPHIA.**

Railroad Materials, Locomotive and Car Findings,  
MACHINERY AND MACHINISTS' TOOLS,  
MINERS' TOOLS, ETC.

☞ COTTON WASTE. ☞  
WHITE AND YELLOW CAR GREASE,  
LOCOMOTIVE BRASS WORK,  
Baggage Checks, Barrows, etc., etc.,  
RAILROAD LANTERNS, SIGNAL LIGHTS,  
STEAM GAUGES, COCKS AND WHISTLES,  
INDIA RUBBER HOSE PACKINGS, ETC.  
LANTERNS OF ALL DESCRIPTIONS,  
ENGINE, STATION, AND SIGNAL BELLS,  
☞ Superior Car Upholstery, etc. ☞  
AGENCY OF THE KEROSENE OIL COMPANY.

☞ Orders solicited, promptly filled, and forwarded with  
despatch and care at the manufacturers' lowest prices.

## S. B. BOWLES,

MANUFACTURER AND DEALER IN

## RAILROAD

## SUPPLIES,

No. 12 GOLD STREET,  
(Between PLATT and MAIDEN LANE.)  
**NEW YORK.**

MORRIS K. JESUP. JOHN KENNEDY. GILBARD A. SMITH.  
**M. K. JESUP & CO.,**  
RAILWAY AGENTS AND BANKERS,  
44 EXCHANGE PLACE, **NEW YORK,**

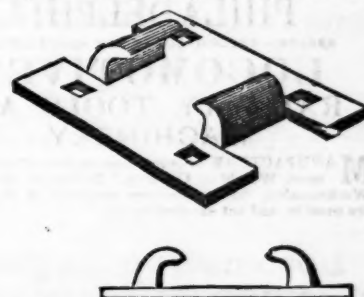
AGENTS FOR THE SALE OF  
FOREIGN AND AMERICAN RAILROAD IRON  
AND ALL MATERIALS NECESSARY FOR THE  
Construction, Equipment & Operating of Railways.  
RAILWAY AND OTHER SECURITIES  
BOUGHT AND SOLD  
Either privately or at the Board of Brokers.

## NEW YORK

## RAILROAD CHAIR WORKS.

**J. B. GREEN & CO., Proprietors.**

SUCCESSORS TO THE  
New York Wrought Iron Railroad Chair Company.  
Office, No. 51 Exchange Place, New York.



HAVING recently purchased, at Receiver's Sale, all the  
Patent Rights owned by the late New York Wrought  
Iron Railroad Chair Company, and also the entire machinery  
for manufacturing their improved Wrought Iron Railroad  
Chair, we are now fully prepared to receive and fill all orders  
from responsible parties, to any extent, with promptness and  
dispatch.

The thickness of the lips of our Chair increases through the  
bend, where the greatest strength is required, and diminishes  
towards the edge; so that a less weight of metal may be used,  
and a strength acquired equal, if not superior, to that of a  
heavier Chair of uniform thickness.

We invite the attention of parties wishing the best Wrought  
Iron Chair now in market, to our works for a supply; believ-  
ing they combine qualities superior to any others now manu-  
factured.

The Chairs weigh from seven and a-half to fifteen pounds,  
according to the thickness of the Iron and size of the Chair.  
To enable us to give you a perfect fit, it will be necessary al-  
ways to send a section of the Rail. We cannot undertake to  
make Chairs without a proper pattern, as it is impossible to  
make a perfect fitting Chair from a drawing.

Our manufacture of Chairs are used on a large number of  
Roads, of which the following list comprises some of them, viz

Galena and Chicago Union Railroad Company,  
North Carolina Railroad Company,  
New Jersey Central Railroad Company,  
Panama Railroad Company,  
Buffalo and State Line Railroad Company,  
New York and New Haven Railroad Company.

Messrs. M. K. JESUP & CO., 44 Exchange  
Place, New York, are the only parties authorized to act  
as our Agents.

## THE ROGERS

## Locomotive & Machine

## WORKS,

SUCCESSORS TO  
ROGERS, KETCHUM & GROSVENOR,  
**PATERSON, N. J.,**

HAVING extensive facilities, are now prepared to furnish  
promptly, of the best and most improved description, either  
COAL OR WOOD BURNING  
**LOCOMOTIVE ENGINES**  
AND OTHER VARIETIES OF  
**RAILROAD MACHINERY.**

J. S. ROGERS, Pres't, } Paterson, N. J.  
WM. S. HUDSON, Sup't, }  
M. K. JESUP, Vice Pres't.  
L. P. STARR, Sec'y and Treas'r,  
44 Exchange Place, New York

## THE SCHENECTADY LOCOMOTIVE WORKS,

SCHENECTADY, N. Y.

HAVING large facilities, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES AND TENDERS,

either for burning WOOD or COAL, with promptness and dispatch.

BRASS and IRON CASTINGS; LOCOMOTIVE TYRES welded and blocked to exact sizes, and every thing connected with the building or repairing of Locomotives furnished on short notice.

These Works being located on the New York Central Railroad, near the centre of the State, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, Agent.

WALTER McQUEEN, Superintendent.

RICHARD NORRIS. HENRY LATIMER NORRIS.  
RICHARD NORRIS & SON,

LOCOMOTIVE STEAM ENGINE  
BUILDERS,

SEVENTEENTH STREET, ABOVE CALLOWHILL,

PHILADELPHIA,

ENGAGED EXCLUSIVELY IN THE MANUFACTURE OF

LOCOMOTIVES,  
RAILWAY TOOLS AND  
MACHINERY.

MANUFACTURE to order, Locomotives of any Arrangement, Weight or Capacity. In Design, Material and Workmanship, the Locomotives produced at these Works, are equal to, and not excelled by any.

Locomotive Engines.

DANFORTH, COOK & CO.,  
PATERSON, N. J.,

HAVING erected an extensive Shop, with the most approved Machinery and Tools, are prepared to execute orders for the various classes of Freight and Passenger Locomotive Engines and Tenders, in the best manner and on the most favorable terms.

Also, Stationary Engines, and the various Tools suitable for turning Repair Shop.

The business of Machine making, heretofore carried on by Charles Danforth & Co., is continued by the present firm, and all orders will receive prompt attention. 1749

UNION WORKS, BALTIMORE.

POOLE & HUNT,

Iron Founders and General Machinists,

ARE prepared to fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TYRES, equal to any produced in the country.

WHEELS and AXLES fitted for use.

HYDRAULIC PRESSES for expressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description. SHAFTING, PULLIES and HANGERS.

WEST POINT FOUNDRY.

R. P. PARKOT, Lessee.

Manufacturer of Marine and Stationary

ENGINES,

Sugar Mills, Saw Mills, Iron Bridges, Cannon,

WATER PIPES, BOILERS, IRON BUILDINGS,

CASTINGS and FORGINGS of ALL KINDS

WM. KEMBLE, Agents,

CHAS. J. NOURSE, 29 West Street.

MACHINERY OIL.

REFINED NEAT'S FOOT OIL

WARRANTED NOT TO GUM

AND equal in every respect to the best SPERM OIL for all kinds of machinery use.

PETER COOPER,

17 Baring Slip,

New York.

## IMPROVED PATENT METALLIC OIL,

MANUFACTURED UNDER THE PATENT OF

J. & W. W. CUMBERLAND,

And under the personal Superintendence of the Inventor.

THE NEW YORK  
CUMBERLAND METALLIC OIL  
WORKS,

FOOT OF 24th STREET, EAST RIVER.

OFFICE, 205 BROADWAY,  
NEW YORK.

WE respectfully call the attention of those interested in the running of

RAILROADS,  
STEAMSHIPS,

Machine Shops, Factories,

and Machinery of all kinds, to the valuable qualities of our Oil.

1. It is entirely free from Gum, cools heated journals quicker than water, and keeps them cool by its superior anti-friction properties.

2. By its use less motive power is required than in using any other oil yet known. It will move machinery with very perceptible less motive power than SpERM OIL.

3. The same quantity will last at least 33½ per cent. longer than SpERM, or any other Oil, and the quality is always strictly uniform in its season. We make Summer and Winter Oil.

4. Having largely increased the capacity of our works, we have been enabled to reduce the prices below those of last year; and it is our intention to keep it at all times below the price of SpERM.

The prejudice existing against Oils has very properly grown up, and we are fully aware of the deceptions which have been and still are practised by unscrupulous persons; but we are prepared to substantiate all the foregoing statements relative to the superiority of our Oils, at

OUR OFFICE, 205 BROADWAY,  
by large numbers of certificates of the best managed lines of Railroads, Steamships, Machine Shops, & Factories in this country, testifying to its value as being greatly superior to any other. Most of the certificates being of prominent Companies, it is probable that more or less of them will be known to all. We have also the MEDALS and DIPLOMAS awarded to us by the AMERICAN INSTITUTE.

We will at all times be ready to refund the money if the facts above stated are not satisfactorily substantiated on trial of the Oil; and we only solicit from those who have never used it very small trial orders. We also make

SUPERIOR GREASE,  
TALLOW, AND  
BURNING OIL.

The BURNING OIL will burn in any lamp that will burn SpERM, lasting longer, and burning without smell or smoke.

We manufacture an

OIL EXPRESSLY FOR  
SEWING MACHINES,  
GREATLY SUPERIOR TO ANY OTHER,  
AND WITH LESS SMELL.

Several have attempted to imitate our Oil, calling it "METALLIC OIL," as well as giving it a similar appearance; and we would CAUTION buyers against them, and advise them to see that our brand—

"NEW YORK CUMBERLAND METALLIC OIL WORKS, FOOT OF EAST 24th ST."

with the names of the inventors and kind of Oil, is upon every package, however small.

Address,—

N. Y. C. METALLIC OIL WORKS,  
205 BROADWAY,  
NEW YORK.

## THE IMPERIAL LUBRICATING OIL,

MANUFACTURED BY

J. C. HULL & SONS,

(Formerly W. HULL & SON.)

108, 110, 112, 114, 116 and 118 CHURCH ST.,

NEW YORK.

FOR RAILROADS,

STEAMSHIPS, MILLS, MACHINE SHOPS, ETC.

THIS OIL, having been before the public for a long time, and having been extensively used in different parts of the country, and on each occasion meeting with unqualified approval, renders the manufacturers confident when making the following claims:—

1st. Its first cost is vastly less than that of any Oil in use, of known merit or acknowledged worth.

2nd. It will not in any way gum or clog up any journal or bearing, all the gum in the Oil being entirely decomposed.

3rd. It will keep all journals and bearings cool, clean and bright as new, thus not only saving wear and tear but saving also no inconsiderable amount of motive power.

4th. It is fully as durable as any Oil in the market, and consumers are invited to make their experiments on such journals as are inclined to be it up.

5th. It is sweet and clean, and entirely free from all odor or unpleasant smell.

Also,—

J. C. HULL & SONS'  
REFINED BURNING OIL.

Buyers are requested to give this OIL a trial, as it is believed that it will be found the

CHEAPEST, CLEANEST AND BEST  
OIL FOR BURNING,

(all things considered), in the market.

CERTIFICATES from a large number of Railroad and Steamboat officers, also, prominent Manufacturers and Machine Builders, can be seen by application as above.

TAW & BEERS,

DEALERS IN

Sperm, Whale and Elephant Oils,

Adamantine Car and other Candles,

AND MANUFACTURERS OF

TAW'S LUBRICATING

GREASE

FOR RAILROAD CARS  
AND HEAVY MACHINERY.

THIS celebrated GREASE has been in use upwards of Ten years, and is in the opinion of FORTY RAILROAD COMPANIES, whom we regularly supply,

The Cheapest and Best Lubricator in use.

Parties ordering, will please state the kind of box, or description of machinery.

TAW & BEERS,  
18 SOUTH WATER ST.,  
Philadelphia.

OIL! OIL!

PEASE'S

IMPROVED ENGINE and SIGNAL OIL,

FOR

RAILROADS, STEAMERS, PROPELLERS,

AND FOR EVERY CLASS OF

MACHINERY AND BURNING.

PRACTICAL TESTS, by Engineers and Machinists of Thousands of Gallons, prove this Oil to be superior for Burning, and TWENTY-FIVE per cent. more durable than SpERM OIL, for Lubricating, and the only Oil that is in all cases reliable, that will keep bearings cool, and

WILL NOT GUM.

In no case has it failed to meet the approval of the consumer.

The Scientific American and Manufacturer's Journal, after testing this Oil, pronounce it superior to any other for Lubricating.—For sale ONLY by the Inventor

F. S. PEASE, 61 Main st., BUFFALO.

Reliable orders filled for any part of the United States or Europe.